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PENINSULAR
JOURNAL OF MEDICINE

AND

THE COLLATERAL SCIENCES.

EDITED BY

A. B. PALMER, M.D.,

Professor of Materia Medica, Therapeutics, and Diseases of Women and Children.

AUG 2 1889

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Professor of Comparative Anatomy in the University of Michigan.

VOLUME II.

ANN ARBOR, MICHIGAN:

Printed for the Proprietors, by

GEORGE E. POMEROY & CO.

TRIBUNE OFFICE, DETROIT.

1854-5.

PENNINSULAR

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AND

CATALOGUED,

E. H. B.

3/11/84

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LEWIS & CLARK

1884

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PENINSULAR

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VOL. II.

JULY, 1854.

NO. I.

ORIGINAL COMMUNICATIONS.

ART. I.—*Empyema—Death—Autopsy.*

MR. EDITOR,—I send the following notice of a *post mortem* examination held upon the body of a young man of this place, not because it possesses any novelty or is worthy of special notice from the Profession; but more particularly to direct attention to like cases, as well as show the necessity of an early operation, as affording the only possible chance of recovery to the patient.

D. W., aged 16, was attacked with pneumonia about three months since; and though I was unable to comply with a request to visit him during the former part of his sickness, I learned that he was *very sick*. Being in the vicinity some time afterward, I called in at the request of friends and found, from physical signs, a state of hepatization of the right lung, though the pain during the first few days of his sickness, had been invariably in the *left* lung. As I could discover no signs of *empyema*, I made a prescription and left. On the 31st of May, however, I was again requested to see the patient to ascertain the nature of a tumor forming a little external to the right breast. Upon a short examination, I determined upon the character of its contents, and the patient and friends

being very anxious that it should be opened. I determined upon complying with their requests, when, to the surprise of all, we found the patient rapidly sinking, and in half an hour he expired. I immediately made preparations for and opened the side, whereupon about *two gallons* of pus were discharged, the first quite thin, the last very thick. The pus had made its way into the right axilla, and occupied also the whole right cavity of the chest, there being no vestige of the lung left.

I was prevented from making any further examination of the body by the interference of the relatives, and therefore cannot speak of any other part. The patient partook of quite a hearty dinner a short time before he died, and was quite sure that if I had opened his side, he would recover.

Yours,

C.

ART. II.—*Congenital Hypertrophy of the Frænum Præputii, preventing sexual intercourse—Operation by R. C. ROCKWELL, M. D., Troy Pa.*

Mr. R——, aged 30, married two years, called at my office to consult me on a “peculiar arrangement” of his penis, which rendered it impossible for him to consummate the marriage act. On examination, I found the frænum præputii about the size of a goose quill, and attached by its anterior extremity, close to the verge of the meatus urinarius, and so short that the glans, even in the quiescent state of the organ, was turned almost at a right angle on the body of the penis.

He stated that during erections, which were rather frequent, the organ became bent “nearly double,” and very painful. He had attempted connection with different women *before* his marriage, and always attributed the failure, which was sure to follow, to the fact “that he was a green hand.” He says that he had consulted a number of Surgeons and was told by all of them that there was no help for him.

I advised division of the frænum; he consented, and I divided it from behind forwards with one stroke of the curved scissors, when the glans immediately turned up into a line with the body of the penis. The next night he visited his wife, when, to his great joy, he discovered that although he had the benefit of no previous experience to serve as a guide, there was no difficulty in consummating the act.

ART. III.—*Review of "VIDAL ON VENEREAL"*—*Translated and Edited* by GEORGE C. BLACKMAN, M. D., Fellow of the Royal Medical and Chirurgical Society, of London, and Physician to the Eastern and Northern Dispensaries, New York.

This work, issued by S. S. & W. Wood, in their usual fine style, is embellished with a number of unusually fine colored lithographs, besides many wood cuts. A full review cannot be made in any reasonable space of time or of paper, because on account of the peculiar manner in which it is written, and the constant reference to the opinions of other writers, so that whoever shall attempt to make a complete review of Vidal, as edited by Blackman, will have to review with it, all the principal records of these diseases from Fernel of the sixteenth century, to Ricord of the nineteenth. The object of this article is confined, therefore, to a notice of one or two points as specimens; simply remarking with regard to the work in general, that it is remarkably full in its references to the opinions and practices of all the great surgeons and writers on these points, both of Europe and America; and though a thoughtless practitioner would be confused in the crowd of conflicting authorities, a man of sound judgment will find it a library in itself, full of valuable hints and landmarks whereby he may assist his own experience and reason to unravel the knotty points, and decide on the more difficult questions arising in venereal surgery.

The introduction contains a long account of the war on the subject of "syphilization," or the induction of an artificial insusceptibility from syphilis by inoculating the disease, as small pox is rendered impossible by vaccination. This proposition to build a bridge over the hell of syphilis whereon the French nation might rush without danger, to Mahomet's paradise, and the arms of the houris, of course attracted much attention. M. Ricord openly opposed it, declaring that the pus of chancre was inevitably contagious, no matter how many previous inoculations there had been. His opponents, however, succeeded in producing one case of inoculation, which seemed at least, to be thoroughly prophylactic, for M. Ricord failed to produce a chancre on him by seven inoculations.

"*The pus of chancre, (says M. Ricord) is inevitably inoculable.* The matter of varila and vaccina, finds those who absolutely resist its action, the pus of chancre none; *all men are equal before chancre.* It was as

you observe, a kind of political constitution which he imposed upon syphilis; it was his constitutional chart."

Now, behold on a certain day, he is startled by a revolutionary fact which breaks down this equality and subjects his patients to other laws? I understand, gentlemen, why this legislator resisted this new fact; I appreciate his war-like ardor. I comprehend why he would have his battle of Saltzback, and to use his own words, *a new campaign in Italy*. At the first announcement of the threatening immunity, he entered his protest, and the amphitheatre of the *Hospital du Midi*, re-echoed his defiance his challenges, "I wait," he remarked, that they may show me an individual syphilized and insusceptible of the action of the virus who will go before the *clinique* "of the *Hospital du Midi* and defy me in camp with the weapons of my choice."

"This challenge was repeated on the 12th of August by the *Union Medicale*. M. Auzias accepted it. On the 23d. of September, M. Ricord declared he was waiting. The Editor of the *Union Medicale* exclaimed, *Facts, facts*, give us facts rather than theories. And then, gentlemen, on the 4th of November, M. Ricord proclaimed that the experiments had been commenced, and that the result would be communicated to the Journal. Search it well, and this communication cannot be found. * * * As if to break this silence, on the 9th of December, M. Marchal wrote to the *Gazette des Hopitaux*, that *M. Laval had presented himself to M. Ricord, that the latter had made on him at two different localities seven punctures, and had inserted three kinds of pus of undoubted virulence without any results.*" (p.p. 45 and 46.)

This, of course, was a matter of triumph to the syphilizers. It went far to prove that syphilization was possible in some cases. However, it practically was of no avail, for this kind of prophylaxis failed to secure others from contagion; and M. Laval himself afterwards lost his acquired immunity and contracted a true chancre.

Another objection to the practice is that the localization of the disease, in the chancre is not to be relied upon, and there are facts to render it probable that a chancre, even when it is early destroyed, occasionally taints the system and ruinously brings on the train of secondary affections. The author seems to have established this fact, and if it is so, then inoculation for syphilis is not safe.

The author adopts an ingenious treatment for those pains in the urethra which sometimes annoy the patient so severely after a gonorrhœa

has been cured. This is a matter of such practical usefulness as any one will testify who has met a severe case, that it is worth rehearsing. He says, "I have observed that patients suffering from urethral pains, either as the result of blennorrhagia, or from certain morbid conditions of the neck of the bladder, often compress the penis with their fingers, and they have declared that in this way they obtain true relief. Again I had observed, as have other surgeons, that calculous patients compress the glans; that they stretch the penis and thus strive to ease their anguish. From this I conceived the idea of employing constant compression. This I effect by the methodical application round the penis of little bands of diachylon plaster, as follows: Each little band should not be more than four lines in width: its length should be sufficient to encircle the penis so as to permit the ends to lap under the penis; the dressing is thus rendered more solid and the urethral compression more certain. The bands should lap over each other, second covering a third of the first, and so on with the rest. The compression should be very decided, but not carried to an extent sufficient to prevent the patient from urinating. These bands should be allowed to remain as long as possible, until the pains have ceased at least three days. This method is chiefly successful when the pain does not extend beyond the limits of the antiscrotal portion of the urethra; when it is seated in the perineum, there is less chance of causing it to disappear. * * * *

I should remark, in conclusion, that the pain may be caused by the remnants of an inflammation, in which case, leeching will be preferable to compression."

In treating of orchitis, the author gives some useful hints respecting the diagnosis of the tissues involved in different cases.

1st. Where the tunica vaginalis is affected. This being a true inflammation of a serous membrane and is diagnosed by the sharp and constant character of the pain, the tense elastic condition of the sac, and the muddy and bloody character of the serum that distends it. This variety is relieved by puncturing the sac.

2d. Where the epididymis is affected. This can be diagnosed by its position in reference to the testicle, and by the fact that being a loose distensible tissue, it forms a larger tumor when inflamed than the testicle proper does.

3d. Inflammation of the parenchyma of the testis. In this form the organ retains its shape; and in consequence of being confined in the dense, firm tunica albuginea, it does not form so large a tumor as the

preceeding varieties. The author is at variance with M. Vélpeau respecting the treatment. The former punctures, not only the tunica vaginalis, but the body of the testis itself, cutting the fibrous envelope and allowing the tubular tissue within, (which he considers is in a state of great compression and strangulation) to expand and free itself from what he supposes to be injurious pressure. Never having seen this measure tried we cannot speak authoritatively about it; but from a priori consideration, we should be disposed to question the propriety of the practice. It is not always desirable to remove pressure from an inflamed part. On the contrary, it is in certain conditions an important means of cure, by mechanically preventing the hyperæmia. Yet, on the other hand, facts must settle the question, and the enthusiastic writer declares that he has punctured four hundred testes without a single unpleasant consequence. And it is also to be borne in mind that, though pressure is desirable in certain stages of inflammation, yet when the tissues have become clogged and packed with plastic effusion, pressure results in supuration or gangrene; and then an incision along the tunica, albuginea might be a most salutary measure.

ART. V.—*On Rheumatism, Gout and Sciatica, their Pathology, Symptoms and Treatment.* By HENRY WILLIAM FULLER, M. D., CANTAB. FELLOW OF THE ROYAL COLLEGE OF PHYSICIANS, LONDON; ASSISTANT PHYSICIAN TO ST. GEORGE'S HOSPITAL, &c. &c. 8 vo. p. p. 322. Republished by Samuel S. & William Wood, N. Y., 1854.

We congratulate the Medical Profession on having added to our literature, a highly valuable work, on the Pathology and Treatment of Rheumatism.

The practitioner has long felt the necessity of a more philosophical insight into the causes, nature, and treatment of this obscure, painful, but frequent malady. Owing to the unsettled state of its pathology, its treatment has mostly been empirical and frequently unsuccessful.

In reference to the ætiology of Rheumatism, our author first undertakes to refute, and in our humble opinion successfully, the prevalent notion that exposure to cold is sufficient to induce an immediate attack of the disease. Thus it must be admitted that Rheumatism often occurs without the slightest exposure; and though there may have been such

an exposure at first, fresh joints are attacked long after all exposure has ceased.

Our author gives in his unqualified adhesion to the doctrine which seems to be rapidly gaining ground with the profession, and more consistent with the train of physical events, that Rheumatism is referable to the irritation of a morbid matter in the blood, generated in the system by impaired or perverted assimilation, and vicious metamorphic action.

Upon this subject, our author labors somewhat zealously, and we do not know how to present him in a more acceptable light to our readers than by making a few extracts from the work itself.

“On what then do the symptoms of Rheumatism depend? If certain substances are introduced into the circulation, fever is set up, rigors often occur, and inflammatory symptoms very shortly intervene in various parts of the body; symptoms which vary in intensity and locality, according to the amount and character of the poison. And if the blood be altered in character, it is practically the same, whether it contain matters foreign to the system, and altogether morbid in kind, or whether it contain an excess only of some material, a certain amount of which is compatible with health. In either case, it is unhealthy and poisonous in its nature; in either case it contains a ‘*materies morbi*,’ which may not only produce fever, or the symptoms of general derangement, but, if irritating in its nature, may give rise to local inflammatory symptoms. Assuming, then, that an abnormal condition of the blood may account for the pain, inflammation, and the curious train of symptoms which constitute an attack of acute Rheumatism, I shall endeavor to show that such a condition does actually exist in this disease, and that it is mostly if not wholly, referable to constitutional causes.

“Many of the most remarkable features of Rheumatism are quite characteristic of a disease dependent on a vitiated condition of the circulating fluid. Its attacks are ushered in by premonitory fever; its local symptoms are erratic, and yet remarkably symmetrical in their arrangement; the heart, the lungs, and other internal organs are affected; and when metastasis occurs, the constitutional symptoms are such as are met with under similar circumstances in diseases known to be connected with a vitiated blood.

“So also in regard to the erratic nature of the articular inflammation. When inflammatory action is excited by a truly local cause, as, for instance, by a blow, nobody ever imagines that it can possibly subside in the spot first affected, and reappear in some distant part of the body. On the contrary, it is an admitted fact, that when any mischief is really local, the inflammation is also local and stationary. On the other hand, whenever the blood is poisoned, as when pus, for instance, has been taken into the circulation, we are never surprised at the occurrence of symptoms in any part, however distant from the original seat of mischief, inasmuch as the poison circulates with the blood to every tissue of the body, and may irritate and ultimately excite inflammation in several parts

successively. Thus the joints, the heart, the lungs, and the nervous centres, may be affected simultaneously or in succession, whilst the functions of the skin, the liver, and the kidneys, may be also more or less interfered with. Such also is the case in regard to Rheumatism.

“On the same ground the symmetry of the local symptoms of the disease affords additional evidence of the poisoned condition of the circulating fluid. For if the blood itself be at fault, it is but consistent with reason to suppose that, permeating as it does every tissue of the body, it should ultimately give rise to similar changes in parts corresponding in function and organisation, whereas, under any other supposition, the proneness of the disease to affect similar parts on either side of the body is utterly inexplicable. The peculiarity in question has been shown by Dr. W. Budd to obtain in all disorders connected with a vitiated condition of the circulation, and why take exception to Rheumatism; why exclude a disease presenting such curious illustrations of the fact?

“If further proof were required, I might refer to the analogy between rheumatism and gout.

“So curiously do these two disorders coincide, so imperceptible in certain cases is the transition from the one to the other, that there is no little difficulty in distinguishing between them. In both an hereditary taint may frequently be traced; in both, the fever is out of all proportion to the extent and severity of the local mischief; in both, the joints are the parts principally affected, and the inflammation, which is of a peculiar nature, observes a remarkable symmetry in its attacks; in both, internal organs are often implicated, and in both, anomalous symptoms of a similar character occur whenever metastasis takes place. And not only so:—Their affinity becomes even more apparent when their history is more closely and accurately examined. For it is then found that whilst children of gouty parents are peculiarly subject to attacks of rheumatism, the offspring of a rheumatic stock no less frequently show symptoms of that hybrid disorder, rheumatic gout, and in some instances of unequivocal gout. Such a striking analogy between the symptoms of the two disorders is surely sufficient to warrant our assuming a similarity of cause, and as in gout the existence of a *materies morbi* is admitted, our view is confirmed, as to the existence of a poison in the blood in rheumatism.

“Whence then, does this poison arise? From what source and by what means does the blood become vitiated?

“There are many circumstances in the history of rheumatism which point to its being of constitutional origin.

“The earliest and most frequent victims of the disease, even when considering themselves in tolerable health, are apt to experience symptoms most clearly denoting functional derangement. Though strong, perhaps, and equal to much bodily exertion, they are peculiarly sensitive to atmospheric vicissitudes, are prone to perspire, and their perspiration has a sour disagreeable odor, whilst their urine, though usually clear when passed, not unfrequently deposits, on cooling, a red brick-dust sediment, a sediment of the lithates and lactates. So constantly are these symptoms associated with a tendency to rheumatism, that they have been recognised as indicative of a “rheumatic diathesis,” or, in other words, of

a state of constitution peculiarly prone to the incursion of rheumatism. And it has been observed that in persons so predisposed, the heart is irritable, and prone to take on inflammatory action, and that even when it is not attacked by inflammation, its nutrition is apt to become perverted, its valves more or less diseased, and the walls thickened in consequence. Moreover, erratic pains ensue on the slightest derangement of the general health, and are relieved not by any specific treatment, but by shower-baths, or tonics, or whatever tends to improve the general health.

"Again, it has been remarked, that whereas certain persons are subject to rheumatism, others under precisely the same circumstances, of the same age and sex, living in the same locality, sometimes even in the very same house, exposed to the same atmospheric vicissitudes, and following the same pursuits, placed, in short, in a precisely similar position with regard to external influences, remain perfectly free from the disease.

"And again, that certain persons, who, during the whole of their previous existence have lived in perfect immunity from the disease, become suddenly tormented with it on changing their mode of living, or from some less obvious cause, whilst others who had long labored under this affliction, get rid of their troublesome enemy in an equally remarkable and mysterious manner.

"From these general facts alone it might be inferred, that the materies morbi on which the symptoms of rheumatism depend, is generated under certain circumstances in the system, and is so generated as a result of some obscure constitutional peculiarity, some particular form of malassimilation.

"There are other facts of a different character which bear just as strongly on the solution of this question. It has now been established beyond dispute, that rheumatism, like gout, is distinctly hereditary. And if the general law of hereditary affections, as Dr. Holland asserts, be that so ably developed by Dr. Prichard, viz., that "all original connate bodily peculiarities tend to become hereditary, while changes in the organic structure of the individual, from external causes during life, end with him, and have no influence on his progeny," it follows that rheumatism, being a hereditary disease, must be in its nature constitutional.

"Perhaps the strongest proof of its constitutional origin is to be found in the variable and often long duration of the disorder. For unless it be admitted that the materies morbi may be generated *de nova* in the system, the long continuance and frequent recurrence of the articular symptoms are altogether inexplicable. If the disease were dependent on a poison introduced into the system from without, it should manifest some of the peculiarities of disorders which acknowledge such an origin; it should occur more or less periodically or epidemically; it should run a somewhat regular and definite course, and should confer upon a person, who has once experienced its attacks, an immunity from, or partial protection against, its future invasion. But rheumatism is always met with sporadically; its career is remarkably variable and uncertain; and so far from a well-developed attack affording protection against its future invasion, it is generally believed, that a person who has once been subjected to its influence is peculiarly liable afterwards to its invasion. And if,

which is the only other supposition, the disease were dependent on the irritation of a matter resulting from temporary suspension of the skin's function, it should surely subside on the re-establishment of free cutaneous action; the more so, as in a well-developed attack, the perspiration is constant and excessive.

"As, then, it appears impossible to avoid the conclusion that the *materies morbi* is generated in the system as a product of malassimilation, or faulty metamorphic action, the next points for consideration are those which serve to indicate its nature.

"A suggestion was thrown out by Dr. Prout, and has been adopted and enlarged upon by Dr. Todd in his Croonian Lectures, that all the phenomena of the disease are referable to the presence of lactic acid, which is developed too freely in the system in consequence of imperfect assimilation, and accumulates in the blood by reason of defective cutaneous action. "It is no wonder," says Dr. Todd, "that as lactic acid is imperfectly excreted through its natural channels, in consequence of the influence of cold in checking perspiration, and is too freely developed in the alimentary canal, it should accumulate in the blood and become eliminated at every point. Moreover, the long continuance of the causes which produce the defective cutaneous secretion and the deranged gastric one, will give rise to the development of lactic acid in the secondary processes of assimilation, thus infecting the blood from every source, and tending to perpetuate the diathesis."

"Now, although the poison which gives rise to rheumatism has not hitherto received actual demonstration, yet many facts conduce to a belief in its identity with some natural excretion of the skin. In advanced life, when, from want of energy in the system, the skin's action is readily interfered with, pain or stiffness is so constantly produced by a draught of cold air, and subsides so soon after reaction has taken place, that we are bound to admit its intimate connection with temporary suspension of cutaneous action. Moreover, rheumatism is so common among persons suffering from renal disease, and other complaints accompanied by a harsh inactive condition of the skin, that it is impossible not to connect its appearance, under such circumstances, with the cessation of free cutaneous transpiration.

"The means which nature adopts for its relief, and the circumstances which attend their imperfect development, are also suggestive of a relationship between rheumatism and cutaneous secretion. No sooner is a person attacked by the disease than excessive perspiration is set up, as if with the view of getting rid of some peccant matter, and the secretion is most profuse at the very part where local inflammation is taking place. If the perspiration be checked, or take place irregularly or imperfectly, the disease is protracted, and is rarely got rid of until free cutaneous action has been reestablished. It is probable, therefore, as the skin is the peculiar emunctory of lactic acid, that in it we have discovered the actual *materies morbi*. Be this as it may, however, the ordinary symptoms of the disease, no less than the history of its rarer modifications, are calculated to point to some excretion of the skin as the immediate cause of rheumatic inflammation.

“But although a specific poison, generated in the system as the result of faulty metamorphic action, is the primary or proximate cause of rheumatism, and constitutes the actual *materies morbi*, yet many agencies may conduce to the formation of the poison and to its retention in the system, and many circumstances may render the body peculiarly susceptible of its influence. These are the predisposing and exciting causes of the disease. Of all such causes, an inherited rheumatic taint is unquestionably the strongest. It exerts its influence slowly, perhaps, but surely; and few who have succeeded to this unfortunate inheritance, but at some period of their life exhibit symptoms of that peculiar state of system which has been recognised under the title of the “rheumatic diathesis.” Thus, many varieties of functional disturbance, many forms of hepatic and uterine derangement, and those diseases of the kidney connected with albuminous urine, by impairing the general health, perverting the functions of nutrition and secretion, and interfering, more or less, with the skin’s action, may become active agents in the production of this predisposition. Their morbid effects are not confined to these particular organs—to the liver, the uterus, or the kidneys: one part of the animal economy hinges so closely on the other, that local mischief occasions general disturbance, and under certain circumstances appears to induce a state of system favorable to the generation of rheumatic poison; a state of system arising, be it observed, not as a direct and immediate consequence of suspended secretion, but as a sequel of perverted function gradually taken on by the system generally, in consequence of imperfect or morbid local action.*

“Thus it would appear that cold and other external agencies are only predisposing and exciting causes of rheumatism, and that the primary, proximate, or essential cause of the disease, is the presence of a morbid matter in the blood, generated in the system as the product of a peculiar form of malassimilation—of vicious metamorphic action. This poison it is which excites the fever, and produces all the pains and local inflammations which are often found associated in an attack of rheumatism. If the rheumatic virus be present in small quantity only, it may cause little more than wandering pains in the limbs, and may scarcely induce any perceptible fever, whilst if it exist in larger quantities, it rarely fails to cause febrile disturbance, and to excite inflammation in various parts of the body. In that respect, however, its effects are found to vary in different cases. Sometimes, though it cause great febrile excitement, its local agency may be confined to the production of external articular inflammation; at others it may fail to produce arthritis, but may give rise to acute inflammation of the heart; and at others, again, carditis may

*The phenomena of gonorrhoea afford an admirable example of how local diseases may gradually give rise to general derangement of the system, and so to the production of the peccant matter of rheumatism. So constantly is rheumatism associated with gonorrhoea, that many rheumatic persons, on contracting that disease, can predict with amazing accuracy the accession of rheumatic inflammation of their joints, and not unfrequently of inflammation of the conjunctiva, such as is apt to accompany rheumatism in unhealthy or cachectic persons.

be one only out of several internal inflammations which it sets up coincidentally with extensive articular mischief. Moreover, there appear good grounds for believing that, as in some cases, it gives rise to excessive febrile disturbance for days prior to the accession of articular inflammation, and repeatedly without exciting inflammation of the heart, so in certain instances it may excite the peculiar train of symptoms whereby rheumatic *fever* is characterized, without producing, from first to last, the slightest concurrent local inflammation, whether of the joints or of the heart, or any other organ."

His second chapter is on the hereditary character of Rheumatism, upon which we shall make no comments for the present.

From his third chapter on the seat of rheumatism, we shall make the following valuable extracts:

"But not only does the rheumatic virus obey the general law of poisons, in that its action is not limited to any one texture or organ of the body, it further resembles this class of agents in displaying a partiality for a particular texture, and particular organs upon which it fixes in preference to others. Such a texture is the white fibrous tissue, which enters into the formation of the aponeurotic sheaths, the fasciæ, the capsules of the joints, the ligaments and tendons, and the fibro-serous membranes in various parts of the body. The parts, therefore, most commonly affected, are the joints and their surrounding structures, the valvular apparatus of the heart, and the fibro-serous covering of the heart, the strong white glistening sac of the pericardium.

"The reason of this predilection of the rheumatic poison for the fibrous and fibro-serous textures throughout the body, is not at first sight obvious, nor indeed, after the most careful consideration, can we assign to it other than a conjectural cause. But it is worthy of note, that the textures most commonly implicated in rheumatism, are all examples of the albuminous and gelatinous tissues, from the decomposition of which, in the wear and tear of the body, are formed those secondary organic compounds, the lithic and lactic acids, with which gout and rheumatism are intimately connected. And as it is but consistent with our knowledge respecting the processes of nutrition and assimilation, to suppose that each tissue selects from the blood, and appropriates to itself such matters as correspond with it in chemical constitution, we may readily conceive that some peculiar attraction may be exerted by the fibrous and fibro-serous textures for compounds, such as the lithic and lactic acids, to which they bear so strong an affinity.

"There are some curious facts in connection with this subject which require particular notice. It has long been observed, not only that the joints and their surrounding structures are particularly liable to be affected by rheumatism, but that some joints are more prone than others to be attacked. Those joints, for instance, which are most exposed, as the knees, the feet and the ankles, the wrists and the hands, are the parts most commonly implicated; next in order, perhaps, follow the elbows, and then the shoulders and the hips. The larger joints suffer more fre-

quently than the small, and the small joints of the hands and fingers more commonly than those of the feet.

"Those joints, again, which have been the seat of local mischief, are more than ordinarily apt to suffer. Thus, a man falls down and sprains his ankle or his knee, and after a time, with care and attention, he entirely regains the use of the part, and experiences no inconvenience from his injury. But if he is afterwards attacked by rheumatism, the joint which had been formerly injured is almost certain to be affected, and will be so in every subsequent attack, and in all probability it will be the very part in which the earliest local symptoms are manifested.

"The same holds good in regard to those parts which are chiefly exercised, and especially when the exercise has been violent and long continued. Blacksmiths, for instance, who wield a heavy hammer, very generally suffer most in the joints of the arms; washerwomen in the joints of the hands and fingers; gardeners, and others accustomed to digging or stooping, are exceedingly liable to lumbago and sciatica; and postmen, and others, much employed in walking, are peculiarly subject to rheumatism of the legs. In all these cases the nutrition of the parts affected is unusually exalted, their power of attracting and separating from the blood such matters as correspond with them in chemical constitution is proportionably increased, and hence, the reason of their being affected prior and in preference to other parts of the body.

"Another fact to which especial attention was first directed by Dr. W. Budd is, that *cæteris paribus*, corresponding parts of the body are similarly affected. If one knee is attacked, it is probable, that ere the close of the disease, more particularly if of long duration, the other will become implicated in the mischief; if one wrist suffers, the other will eventually suffer also. Nor is it strange if the local affection be due to the irritative property of any matter in the blood, that parts which correspond in function and organization, and are equally subjected to the same cause of irritation, should suffer equally and in a similar manner. It is only surprising that any one should hesitate to assign a constitutional origin to a disease presenting features so strongly indicative of a poisoned condition of the blood.

"Whatever the part of the body attacked, the aspect of rheumatism varies greatly in different cases. Sometimes the disease is acute; sometimes mild, both in its local and constitutional symptoms; at one time some part of the body is affected, which at another perhaps remains unaffected throughout. Hence has arisen the division of rheumatism into several different varieties. Strictly speaking, any division must necessarily be incorrect, inasmuch as, however varying in the locality and intensity of their symptoms, all forms of the disease may and do constantly pass the one into the other, and there is nothing in their pathology to justify such a separation. But practically there is much advantage in adopting some artificial arrangement. A well-marked distinction not unfrequently exists between the different varieties: they appear to occur under different circumstances of age and constitution, and require treatment differing widely in its character. Hence it becomes expedient to make such practical distinctions as are calculated from their simplicity to

facilitate the description of the various modifications of the disease, and those which I propose to adopt, are first, acute rheumatism, or rheumatic fever; 2d, rheumatic gout; 3d, chronic rheumatism; 4th, neuralgic rheumatism."

Chapter V. is devoted to the treatment of acute rheumatism and rheumatic fever, from which we make the following extracts:

"By what means, then, can we best effect our purpose, and to what extent is it prudent to employ these means?

"If the *materies morbi* be indeed an acid, or an acidulous compound; if it be lactic acid, for instance, as there are cogent reasons for believing it to be, then will its neutralization be effected, its irritative property probably diminished, and its elimination promoted by a free exhibition of alkalies and neutral salts; and these objects may be further advanced by the administration of purgatives, sudorifics, and diuretics, to act upon the various excretions. With the view of checking the further formation of the poison, and of restoring that healthy state of assimilation, which, at the outset of the disease, is interrupted or arrested, colchicum, mercurials, and alteratives may be given, and, as the febrile symptoms begin to subside, may be combined with, or followed by the use of quina, or of some other tonic, which, at certain stages of the complaint, may be better calculated to improve the function of assimilation. In allaying the general irritability of the system, and more particularly the irritability of the heart, opium, conium, and nitre, together with the cautious administration of antimony, are remedies of the greatest value; and, if vascular action be excessive, and secretion sluggish, blood-letting may be sometimes beneficially employed.

"Such is the rationale of the treatment to be adopted. Where the objects to be accomplished are fairly understood, the means of attaining them will be obvious to every one conversant with medicine; and the question to be decided is not so much what remedies should be employed, as in what quantities and under what circumstances each remedy should be made use of.

"Before explaining my own views on this subject, I will take a brief review of the various remedies and the chief methods of treatment which have been hitherto recommended for the cure of rheumatism; and first, as to the heroic remedy of venæsection."

Here follows a review of the various plans of treating this disease, each of which has been exclusively advocated and relied upon by high authority at different times, and in each its occasional applicability and consequent success, and the class of cases in which it is found inapplicable, and the consequent want of success, is pointed out. Thus many pages are devoted to a consideration as remedies of blood-letting, purgation, calomel, opium, vapor and hot-air baths, tartar emetic, cinchona, colchicin, quinine, nitrate of potash, lemon juice, alkalies and their salts, &c.

But the author's own plan of treatment, and its rational, may be gathered in part from the following extract :

"Of the value of alkalies and their salts in acute rheumatism, it is impossible to speak too highly. Whether regard be had solely to the facts that the normal alkalinity of the saliva disappears, that the acidity of the perspiration is excessive, that the urine is surcharged with acid, and that the alvine dejections are also loaded with acidulous matters; I say, whether regard be had solely to these significant facts, or whether the question be viewed in reference to the occurrence of fibrinous deposits on the valvular apparatus of the heart alkalies in either case cannot fail to prove useful. They are not only active depurating agents, and corrective of the abnormal condition of the blood and the excretions, but they are, in a great measure, preventive of the deposition of fibrin. Administered alone, however, and in ordinary doses, they are quite inadequate to effect a cure. The system is so surcharged with acid, that no ordinary doses can restore its alkalinity; and even when given in doses sufficient to effect this purpose, alkalies fail to arrest the disease from being unequal to prevent the further formation of acid in the system. Of this I am fully satisfied by experience. The pain may be greatly alleviated, and the force of the febrile and inflammatory symptoms checked, but the disease will rarely be arrested or shortened in its duration without the addition of other medicines.

"It will be gathered from what has been already stated, that my chief objection to many of the expedients which have been resorted to for the cure of acute rheumatism, lies not so much against the remedies themselves, as against the mode in which they have been employed. Each remedy or class of remedies has been too exclusively relied upon. There may be occasions in which blood-letting or opium, or calomel and active purging, are necessary; there may be circumstances which call for the exhibition of guaiacum, of nitre, of colchicum, or other agents; but it seldom, if ever, happens that the cure of acute rheumatism can be safely intrusted to any single remedy. For as the disease presents different aspects in different cases, so does it also at different stages in the same individual; and even were it not so, the constitutional disturbance is so great, the cause of the derangement is so widely spread, and its effects extend to such a variety of organs, that every principle of medicine points to a compound method of treatment as most likely to lead to a successful issue.

"The treatment to which I usually have recourse at the outset of the attack, is that alluded to at the beginning of this Chapter. It is made up of alkalies and the neutral salts, with colchicum, calomel and opium. Sometimes a little antimony is added, sometimes the aid of purgatives is had recourse to, and occasionally, though rarely, I deem it expedient to premise a moderate blood-letting. Baths are never employed if the skin is acting freely; but if, instead of being bathed in perspiration, it remains dry and hot, and burning, I then endeavor to stimulate its action by means of the vapor or the hot air bath.

"As venæsection, if employed at all in acute rheumatism, is to be made

use of with the view of producing an impression on the train of morbid actions, and expediting the operation of other remedies, it must necessarily take the lead of all other measures; and the first question to be decided, theretore, in every case of acute rheumatism, is as to the propriety of having recourse to its employment. It has been already pointed out, that the use of the lancet is not necessary for the relief of the pain or the tranquillization of the pulse, and that in the pale and weakly it exercises an influence prejudicial to the patient by rendering more irritable his already irritable and excited heart. But in the young, plethoric, and robust, in whom secretion is insufficient, whose pulse is full and bounding, and whose skin is dry and hot, and burning, it certainly does assist in expediting the action of other remedies, and so in promoting recovery. These, therefore, are the only cases in which it should be employed, and a single bleeding of from eight to ten ounces is generally sufficient. It relieves that excessive congestion on which the want of secretion, in great measure, depends, and which forms an obstacle to the action of those remedies on which we rely for effecting a cure.

“The next point is as to the expediency of giving calomel and purgatives. If the bowels are acting once a day, it is seldom necessary to make a more frequent call upon their activity, but a dose of calomel and opium may be prescribed with the view of modifying the character of their secretions. If the bowels are sluggish in their action, and the dejections dark colored and offensive, a dose of calomel combined with opium should be administered at once, and followed after the lapse of six or eight hours, by a draught containing the infusion of senna, together with half an ounce of the potassio tartrate of soda, and twenty minims of the vinum colchici. And the amount of opium should be so adjusted to the dose of the purgative, as to procure one full and copious evacuation without the distress attendant upon purging.

“When once the bowels have been freely acted on, the state of the secretions must be our guide as to the repetition of the calomel and the morning laxative. If the tongue be rather dry; if the bowels continue sluggish, and the dejections dark colored and offensive, the mercurial and the purgative should both be repeated for several successive days. If, on the other hand, secretion from the bowels be healthy, the further exhibition of mercury is unnecessary. If, again, the secretions be copious but unhealthy in character, the calomel and opium should be repeated at night, but need not be followed by a purgative in the morning, as after one or two doses of the mercurial, the motions become lighter colored, more bilious in appearance, and of a less offensive character.

“Whilst the state of the intestinal secretions are thus attended to, alkalies or the neutral salts should be administered in combination with colchicum, full doses of opium, and sometimes a little antimony. At one time I used to content myself by giving a saline draught, with the addition of fifteen or twenty grains of the carbonate of potash, or the carbonate of soda, three or four times in the course of the day, but it soon became apparent that in order to obtain the full benefit of alkalies, it is necessary to give them in very much larger quantities—in doses proportioned to the extreme acidity of the system. In large but ordinary

doses they generally mitigated the severity of the symptoms, yet failed in affording more than partial relief, but when they were exhibited in sufficient quantities, and in combination with other remedies, the most agonizing pain was speedily removed, and the fever subdued with marvellous rapidity. I have, therefore, ever since administered them largely, and have pushed them until my object has been attained. Nor have I seen reason, on any one occasion, to hesitate in following out this plan of treatment. It has now been pursued in a large number of cases, and in almost every instance has produced the most astonishingly favorable results. The patients have speedily lost their pains and have proceeded rapidly to convalescence. In twenty-three out of thirty-nine cases in my note-book, the pulse was tranquillized within forty-eight hours from the commencement of treatment, and in twenty-eight the pain was lulled, and the local inflammation greatly subdued within the same time, whilst in the remaining cases a longer period was required, in consequence either of previous constipation, or of the co-existence of some internal complication.

“The form in which I usually administer the remedies, is that of a simple saline or a nitre draught, to which, if the patient be a person of average strength and robustness, bathed in profuse perspiration, with red, swollen, and exquisitely painful joints, a furred tongue, loaded urine, and a full and bounding pulse, I usually add from two to three drachms of the potassio tartrate of soda, ten or fifteen minims of the *vinum colchici*, from fifteen to twenty minims of the *vinum antimonii*, and from ten to fifteen minims of the tincture *opii*, or of Battley’s sedative solution, to prevent the salt running off by the bowels. This draught is repeated, for the first twelve or twenty-four hours, at intervals of three or four hours, according to the strength of the patient and the severity of the attack; and if the pain is excessive, I prescribe a pill containing from half a grain to a grain or a grain and a half of opium, or an equivalent dose of Dover’s powder to be taken once or twice a day, taking care to increase or diminish the quantity of the sedative, according to the circumstances of the case; on the one hand, avoiding constipation and narcotism, and on the other, guarding against diarrhoea.

Sometimes, though rarely, the stomach does not easily tolerate these large doses of the neutral salts, and in such cases, the greatest benefit is derived from the addition of a little lemon juice and an alkaline carbonate, forming a saline effervescing draught. With this variation an instance rarely occurs in which the medicine deranges the stomach, or produces the slightest disagreeable effects.

When once the medicine has begun to take effect, which is evidenced by the gradual decrease of the pain, the tranquillization of the pulse, and the increase in the quantity and specific gravity of the urine; it is repeated every fourth hour only, and then every fifth or sixth hour; and usually at the expiration of two or three days, I find its work in great measure accomplished: the saliva, by that time has lost its acidity, the pains and inflammation have subsided; the pulse has fallen, probably, from 120 to 85 or 90 beats in a minute; the tongue has become moister and less red and furred; the urine more abundant, less loaded with the

lithates, and of a higher specific gravity; and the perspiration less acid, less sour smelling, and less profuse. In proportion as these symptoms of amendment manifest themselves, so is the dose of the alkalies decreased, until after the lapse of three or four days, I usually feel justified in commencing the administration of quina during the day, taking care to maintain a free action of the bowels by exhibiting, now and then at bed-time, two or three grains of the acetous extract of colchicum, together with aloes or rhubarb, and if necessary, a grain of calomel or blue pill. Should there be the slightest return of pain, the least increase of coating on the tongue, or, indeed, any evidence of returning fever, the use of quina is at once abandoned, and alkalies are again resorted to. But generally, the case proceeds steadily to convalescence, and after a few days the pills are either omitted altogether, or repeated less frequently and in diminished quantities. Sometimes, if there be not much tendency to perspiration, the *mistura guaiaci* of the Pharmacopœia may be administered with the addition of a drachm of the volatile tincture of guaiacum, and twenty or thirty minims of liquor potassæ, whilst if the patient appears to be cachectic, the decoction of cinchona, with the addition of the ammoniated tincture of guaiacum, or of half a drachm of the extract of sarsaparilla with two or three grains of iodide of potassium, and twenty minims of liquor potassæ, proves a more active and efficient agent.

“But I do not confine myself to internal remedies. I endeavor to alleviate articular inflammation by means of external topical applications.

“By many persons this practice is regarded as useless, and by some has been condemned, on the ground that, by interfering with the inflammatory action taking place at an affected rheumatic joint, we incur the risk of disturbing the attraction of the morbid element, and of driving it to some internal viscus. Doubtless, if cold topical applications were to be employed and the elimination of the poison thus forcibly arrested, a very hazardous experiment would be tried and serious internal mischief would probably arise. But against leeches, blisters, and warm fomentations, this objection cannot be reasonably urged: they do *not* check the continuance of perspiration; they favor rather than arrest the exit of the morbid matter, and the only fact, therefore, to be ascertained in regard to them, is their remedial or curative power.

“It has been already stated, that rheumatic inflammation very rarely leads to disorganization of the joints, and moreover displays a remarkable disposition to shift or migrate from one spot to another. Hence, leeches and blisters are rarely called for in the acute disease: they are generally unnecessary for the relief of the inflammation, and are useless in most cases, because of its repeated migration. They might, and indeed they do, afford very marked relief to the severity of the inflammation, but they afford no guarantee against its recurrence. Their use, therefore, should be restricted to those cases in which inflammation lingers about a particular joint, or in which the intensity of the action is so great as to threaten the integrity of the structures. But warm fomentations of every description may be always employed advantageously. They soothe the parts, promote perspiration, and thereby favor the elimination of the poison. As the object of the applications is to allay the pain, and to

counteract the extreme acidity which always accompanies, if it be not the cause of rheumatic inflammation, it is manifest, theoretically at least, that an alkaline and opiate solution should prove the most effective remedy. And so in practice it is found to be. I have tried hot water; I have tried a warm solution of nitrate of potash, as recommended by Dr. Basham; I have tried a simple alkaline solution; and I have tried a mixed alkaline and opiate solution, and the latter has proved far the most powerful in allaying the pain of rheumatic inflammation.* In every instance in which it has been employed, the relief obtained has been almost immediate, and the pain and inflammation have subsided rapidly."

Chapters VI. VII. and VIII. are devoted to the consideration of rheumatic diseases of the heart, viz: causes, pathological effects, symptoms, progress, terminative treatment, &c.

Chap. IX. is on statistics of heart disease, in connection with rheumatism.

Chap. X. on affections of the brain, lungs, pleura, and disorganization of the joints, as consequences of acute rheumatism.

Other chapters are devoted to the consideration and treatment of rheumatic gout, chronic rheumatism, sciatica, and other forms of neuralgia rheumatism.

On the whole, the work should be considered a meritorious one, and deserves to be in every physician's library.

ART. VI.—*Clinical Lectures on Pulmonary Consumption.* By THEOPHILUS THOMPSON, M. D., F. R. S. FELLOW OF THE ROYAL COLLEGE OF PHYSICIANS, LONDON; PHYSICIAN TO THE HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, &c., &c., &c., 8 vo. p. p. 259. Philadelphia, Lindsay & Blackiston, 1854.

This book is made up of thirteen clinical lectures, delivered in the Brompton Hospital, a worthy charity in London, instituted for the benefit of Consumptives. These lectures were originally delivered in substan-

* The solution I usually employ is Potassæ Carb., ℥j Liq. Opii. sedativi, ℥vj, Aquæ Rosa, ℥ix. Sometimes, however, I substitute the Decoction of Poppies for the Liquor Opii and Rose Water. Thin flannel soaked in one of these mixtures should be applied to the inflamed parts, and the whole should then be wrapped up in gutta percha. Markwick's epithelium forms a tolerably efficient substitute for the flannel and gutta percha.

In a practical point of view, the determination of this question is not of much importance; but on theoretical grounds, as bearing upon the occurrence and possible prevention of cardiac inflammation, it is of the utmost moment.

tially their present form during the spring of 1851, and were published in the London Lancet for that year, and those who read them there will be delighted to meet with them now in the more eligible form of a separate book, with some corrections and additions.

Medical men are now studying the pathology, symptoms and treatment of this dire disease, hitherto considered incurable under the stimulus of higher hopes and impulses; for it is now acknowledged that, under the guidance of a more enlightened pathology, aided by acquisitions to our materia medica, this disease may often be prevented and be sometimes permanently arrested at different stages of its progress.

Hence, a book from any medical scholar of eminence on this subject, is sure to find readers at this time, and much more so when coming as this does from one who has devoted many years to this, especially in such a wide field for observation as that of the Brompton Hospital for Consumption in London.

The practitioner who reads this book will be put in possession of information in reference to diagnosis and treatment; and especially, as to the precise means of using new and more successful remedies, and adapting them to varying circumstances, that will be of much practical benefit in his every day round of practice.

ART. VII.—*Epidemic Fever of York and vicinity*, 1853, by H. W. GOUGH, Physician.

The thermal peculiarities of the year 1852, were not such as to induce disease, severe or peculiar for the coming winter. The winter of 1852-3 was characterized by considerable variety of season: rain, snow, cold, and thaws succeeding each other every one or two weeks. March was more equable than this month sometimes is. There was no extreme cold weather during the winter; some sleighing in Jan., Feb. and March.

The whole number of cases noted, for the winter and summer is 45, of which 21 were under care in the winter and spring, and 24 in the summer.

Average duration, 10 days.

Terminated in health, 38

“ in phthisis, 2.

“ in death, 5.

Of the fatal cases, 3 were in the winter, 2 in the summers.

One aged 65 died on the 7th day of the disease.

One	"	38	"	3	"
One	"	1	"	5	"
One	"	46	"	34	"
One	"	12	"	7	"

Two of these cases I saw but once.

Both of the cases that developed Phthisis, had signs of that disease, before having the fever of the winter, but Phthisis had not been proved by physical examination. Of these, one died in April, the other in December.

The cases were ushered in with chills, fever, bilious vomiting yellow or pea green, coma, delirium, pain in gastric region, hot and dry skin, quick and frequent pulse, numbness of hands, arms or feet; cough at first, or within two or three days, tongue variable, not much coated in most cases, eyes suffused, urine high colored, scarce, and voided with difficulty.

Among the characteristics of the epidemic, I may mention the following:

Its element of continuation—most of the cases had a tendency to self limitation, whatever treatment was pursued. In the commencement of some cases the intermittent principle predominated, indicating Quinine. The exhibition of this medicine would destroy the periodicity, but instead of a cure, we had a continued fever, in the place of an apparent remittent. I do not know that a single case was *cured* by quinine, though given as indicated, but many cases were so disturbed, that they were more amenable to treatment, and recovery probably took place sooner than if quinine had not been administered.

The character of the congestions afford another distinction. The lungs and nervous centres were almost invariably complicated. Bronchitis was present with scarce an exception, accompanied sometimes, with mild pneumonia. There was not a case in my care in which pneumonia predominated, as a sign of disease. Pleurisy, with effusion was very well developed in one case, but the signs of fever predominated.

Decided hepatic congestion occurred in one case. The hepatic function was more or less disordered in nearly all cases, but not to the extent of being a leading indication in treatment.

Anæsthesia, more or less complete, of the hands and arms or feet and legs, occurred in 27 cases. In many of these cases, tenderness of the spine, or in the course or some of the nerves was evident.

There were comatose symptoms in 17 cases.

Acute congestion of the spine in 3 cases.

Delirium in 12 cases.

Sore throat in most cases, number not noted.

The cutaneous appearances were various. In some cases no evidence was derived from the surface, the skin remaining clear from first to last. In no case were the rose, or maculated spots, described as distinctive of typhoid or typhus fever developed, or if developed, they were not observed. In 22 cases there were cutaneous symptoms—dark spots, apparently cutaneous congestion appearing and disappearing several times daily for the first few days of the disease; or a bright rash, resembling the eruption of measles in some cases, that of scarlatina in others. These exanthems were observed most on the face, neck and arms, but found also on the body when looked for. In several cases small vesicles were present about the size of a split pea, some larger, and some smaller, filled with a semi transparent, or purulent matter, in the larger specimens, a small core, or center of suppurating tissue was present. These little pustules were very painful, causing fever, and nervous excitement. They occupied the thorax and abdomen. In one case, in the care of a quack, these vesicles were numerous, some containing bloody serum and bloody pus. The patient had been puked, purged, quined and *swet*-ted, *a la mode*, for remittent fever, during three weeks, when death closed further proceedings. The case presented many signs of typhus.

One case had dark brown or purple sores on the thorax and abdomen.

In nearly all the cases, there was a slight degree of constipation of the bowels either at or before the time of my seeing the patient. This was overcome with the mildest laxative, and when the peristaltic action was reëstablished, laxatives were seldom further necessary. The alvine discharges were mostly dark colored—of some of the shades described as billious. In some cases ochre colored stools were voided.

Gurgling in the right Iliac region was present in all cases specially examined for this symptom—half of the whole number.

Pain in the abdomen, shooting, lancinating, or a tenderness on pressure was present in 26 cases, mostly those of summer.

Meteorismus or Tympanites, was present in 37 cases, in those of summer, it was a symptom from the first day, in those of winter evident in 2–5 days.

The urinary secretion was not noticed with desirable exactness. In all cases it was scanty, high colored, depositing, in some cases, reddish sediment, voided with difficulty, rendering special treatment and means necessary.

Abortion occurred in one case.

In some cases, a decided tendency to collapse was present. This, or its premonitories occurred in 13 cases, 8 in the winter, 5 in the summer. This occurred any time—from the 2d to the 16th days, but most of the cases in 7 to 9 days.

Spasmodic contractions, or twitchings of the muscles, and tendons were evident in 18 cases.

Epistaxis occurred in several cases.

No evidence of contagion in any cases though two or three cases occurred in some families—not simultaneously.

Age.—1 year to 10 12 cases.

"	10	"	20	13	"
"	20	"	30	8	"
"	30	"	40	6	"
"	40	"	50	4	"
"	50	"	60	1	"
"	60	"	70	1	"

I am not aware that any particular symptoms were more prevalent in one of the above periods, than another. All patients complained of a pain in the back, lumbar region, and head, and extreme tenderness of the whole body, the whole dermal tissue being sore.

Thirst and loss of appetite, were symptoms common to most of the cases.

The peculiar odor of continued fever was present in 14 cases, particularly developed in 7 cases.

Spontaneous perspiration—not that of periodicity—was present in 14 cases; of these, the "washerwoman's sweat" was evident in 7 cases.

In treatment, the first object in any case was to meet any special symptom present. Sometimes vomiting was to be controlled as a first step in the treatment; this was not easily done in obstinate cases, counter irritants, calomel, morphiue, opium, cresote, lime water, &c., would have a temporary effect. Even when this symptom was controlled long enough to produce a cathartic effect on the bowels with physic, it would return again, and subside only when reaction was fully established from the initiatory chill, and the liver had re-assumed its functions.

A mercurial laxative was indicated in some cases. If there was nausea, coryza, cough, or foul tongue, ipecac or eupatorium was resorted to, subsequently diaphoretics and expectorants, conjoined with such counter irritation as the case demanded.

In several cases, full catharsis, and emesis, rest, and one or two free perspirations, relieved the patient of the disease. One case was apparently cured by pills and Dover's powders, the same treatment in three other cases was little better than none.

The effect of remedies in particular diseases, is often of value in making a diagnosis. Some articles of the materia medica are well enough known, to determine what effect they should have in a given case.

This section of country is generally level, traversed to the south east by the Saline river. South of the river, the land is heavy timbered, very level, good soil. The fatal cases all occurred on this south side of the river. On the north side the land is a little more uneven, and more cleared. As a whole, this vicinity presents all the requisites for a malarious section.

I have no desire to decide whether this epidemic is more of a bilious, typhoid, or typhus fever. The typhoid and typhus characters, are at least sufficiently evident to merit attention.

Washtenaw Co., June, 1854.

SELECTIONS.

From the Boston Medical and Surgical Journal.

The Circulation of the Blood.

The doctrine of Mrs. Willard, whether true or false, when first announced was comprised in a theorem of bold and definite outlines; and, as if abjuring all ambiguity, the declaration that "the chief motive power of the blood is in the lungs," which might have sufficed, was surmounted by another—"and not in the heart." So far, all is well, and well becomes the champion of a newly-discovered truth. But truths are more or less recondite; some requiring only to be presented to the mind of ordinary intelligence, to ensure belief; others demanding elaborate detail and reiterated illustration, to be made intelligible. To the latter class, the truth of which Mrs. Willard claims to be the discoverer, evidently belongs.

The questions involved in this theory are of grave import; and I dissent from the opinion of one of the correspondents of the Journal, that,

true or false, they can be of no use to practical medicine. Mrs. Willard is justified in her assertion, assuming her doctrine to be true, that "it may be made available, in innumerable cases, both for the preservation of health and the cure of disease." Unfortunately, however, for the cause of truth, there has been no small amount of temptation to meet the announcement of her discovery with badinage, rather than with argument. The pages of the Journal, in her own communications, no less than in those from Dr. Cartwright, furnish abundant material to illustrate what I mean.

I might specify many examples; for instance, in a late number, she speaks of "the truth of the God of nature, for a season committed to her weak hands." A sore trial, I fear to Dr. Hunt's continence; and I trust the publisher erased the passage from the doctor's copy. The well-trained and well-stored mind of the fair theorist would supply the appropriate comment at once, could she separate herself from her supposed discovery, and its anticipated halo. In regard to Dr. Cartwright, she might exclaim, "save me from my friends, and leave my enemies to me." I need only refer to former numbers of the Journal, for examples of indiscreet and premature laudation, so ineffably absurd and ridiculous, that we may well marvel whether, from Dr. Cartwright, it could have been anything less than irony.

Had Mrs. Willard published her discovery in any other terms than those implying veritable demonstration; had she clothed it in the graceful garb of suggestion or inquiry—an appropriate costume, surely, for a lady on her first appearance in a department of science, which must have shared quite sparingly in the multifarious labors of her active life—she would have met with no repulse. Her own premature appropriation of the glories of her supposed discovery; her unwarranted assumption, that the methods of resuscitation, and the art of preserving and restoring health by the agencies of exercise and pure air, now and long since understood and practised by every tyro in physic, were the results of her own discovery; her audacity in claiming all these as her own timely gratuity to a world, just on the eve of suffocation—surely, these are no light provocatives; and may at least palliate the discourtesies of some of the correspondents of the Journal.

In my own professional career, I have served, as doubtless thousands have done before me, in the humble capacity of prompter to some scores of urchins, at their "entrance on the stage," where their appropriate business was to "play their parts," but who were doggedly bent on forgetting them. Having no tact at gentle persuasives, and no *meal* in my *mouth*, I have "blown them up" at once; and candor compels me to confess, the malaperts have seldom failed to "give me as good as I sent."

Such, I apprehend, are among the causes which have prevented Mrs. Willard's theory from receiving the notice, which it may possibly deserve from competent physiologists. But what is her theory? It is noticeable that the phraseology of her "epitome," contained in a late number of the Journal, is somewhat less clear and definite than her original theorem, which was, that "the chief motive power of the blood is in the

lungs, and not in the heart." In the "epitome," it is thus modified—"the chief motive power of the blood originates in the lungs, in consequence of respiration." Is the import of the first, identical with the last? And does not her omission of the latter clause in her original theorem, "and not in the heart," and her use of the phrase, "originates in the lungs," as she has it in her "epitome," savor of some embarrassment in adapting it to all the exigencies of the circulation? If the epitome was intended to elucidate, and furnish an intelligible rationale of her doctrine, it is clearly a failure. It still remains a naked theorem; a bare assertion that "the chief motive power of the blood is in the lungs, and not in the heart."

The "explanation," contained in the epitome, "which she had sometime felt to be necessary," furnishes merely the assertion that "a portion of the water in the blood is there changed to vapor, and the volume of the blood becomes so expanded that it must move. At the capillaries, and in the veins, it is condensed by the effect of the external air." This is the sum of her rationale of the circulation; the consummating elucidation of "the truth of the God of nature, committed for a season to her weak hands." Having thus finished her labor; having giving to physiology a new domain; having taken formal possession, not in Ferdinand's but in her own name, I trust no Americus Vesputius will rob it of its appropriate designation, *Willardia*.

Columbus, after exclusive devotion of himself, for a long series of years, to the demonstration of his hypothesis, that a counterbalancing continent would be found in the West, indicated, as he thought, not only by general analogies, but by incidental evidence, "explained" his theory at last, by planting the feet of his incredulous followers on terra firma. "The mission which God has now crowned with success, was committed to my hands by Himself," was an exultation not only tolerated, but responded to by every intelligent and liberal mind. Did he indulge in this language while inspecting the strange fragment of drift wood found on the shores of the East?

In justice to Mrs. Willard, however, ought we not to admit that she may have been the first to notice a fragment of "drift wood," hitherto unobserved, on the field of physiology, and possibly of no small import in physiological research? I recollect nothing in the history of theorizing, on respiration and the circulation, which militates against her claim to originality in the suggestion, that the process of oxygenation and decarbonization of the blood, in the lungs, by the extrication of caloric, and the consequent expansion of its volume in the capillary vessels, may have an agency in the movement of the blood from the lungs, toward the left heart. If so, in all other regions, where aortic terminations and venous radicles are to be found, affording any facilities for the access of caloric, especially in the skin, this expansion may possibly contribute something as "available" force, to capillary and venous circulation. This suggestion, or discovery, if it be substantiated, which is not impossible, is a creditable achievement, in which Mrs. Willard may justly feel complacency; and for which no man, "woman" though she be, may reproach her. The correspondents of the Journal have merely objected to the

transformation of her islet, by her own mental mirage, into a mighty continent; to her hypothetical metastasis of the chief motive power; to her transfer of empire from Rome to Constantinople; and, especially, to her edict, that on her own theory, as on a pivot, the entire interests of humanity shall hereafter revolve!

It is certainly unfortunate that the clearness and definiteness of Mrs. Willard's theory have been much obscured, in her progressive postulations and "definitions of her position." Does she mean, by "motive power," veritable propulsive force; the *proximate* agency, by which momentum was imparted to "the stone from the brook," that smote the Philistine? This would be in accordance with her original theorem; "the chief motive power of the blood is in the lungs, and not in the heart." Or does she mean the *remote* causes, to be found in David's patriotism and allegiance to his Maker, prompting "in the same direction?" The latter has some adaptation to the theorem of the "epitome," which is thus worded—"the chief motive power of the blood originates in the lungs, in consequence of respiration." Although this variation in the form of her theorem contains no recantation, it admits of equivocation. Respect, however, for Mrs. Willard's consistency, as a philosopher, compels us to regard it as identical with the original.

Before considering the adaptation of Mrs. Willard's theory to the known principles of natural science, we should briefly advert to the settled opinions of physiologists, on the circulation of the blood. The heart then, is regarded as the efficient agent, which propels its contents, by the contraction of the muscular walls constituting its ventricles; from the left, through the aorta and its branches to the whole body; from the right, through the pulmonary arteries, to the lungs. The structure, size, firmness, position and relations of this organ, seem to fit it perfectly for the office assigned to it; and we look in vain for any other point in the circulation, which may furnish the indispensable facilities required, as a seat of any adequate amount of motive power. All the predecessors of Mrs. Willard, since the days of Harvey, have agreed in this, that the contraction of the ventricles of the heart is the chief propulsive power of the blood.

Many have supposed that the *diastole*, no less than the *systole* of the heart, has an important agency in the circulation. The plenitude of rich material, and the highly wrought structure of the heart, must furnish it with the elements of great power; and it is demonstrable that its relations are so adjusted that it may act in a direction to *dilate* the ventricles. The fact having been established, that the *systole* and *diastole* of the living heart may continue, for a limited time, independently of the influx of any fluid, the inference is unavoidable that the *diastole* is not a *passive* result. Consequently, just in proportion to the power of the muscular action of the heart, effecting dilation of its cavities, where a vacuum can only be averted by the influx of blood, will be the atmospheric pressure; operating on the vascular system by propelling its contents, "directed by the valvular system," into the dilating cavities; the heart, by a double function, thus propelling the blood through the arteries, by its *systole*, and imbibing it from the veins by its *diastole*.

Generally, the arteries have been regarded as exerting a small degree of propulsive force, both by the properties of contractility and elasticity appertaining to their coats. There can be no doubt of the fact, that these properties have an agency in adapting the calibre of the arteries, to the varying quantities of blood, expelled by each systole of the heart; thus indirectly, at least, co-operating with the force of the heart. Physiologists, however, have been divided in their opinions, on the subject of capillary and venous circulation; some regarding both these portions of the vascular system as capable of propelling their contents, independently of the heart's action; others making them equally passive with the arteries; while others, I think with good reason, claim both for capillaries and veins, the power of co-operation with the heart, in circulating their own contents. The fact, well authenticated, that a fluid injected into the aorta of the dead body, by moderate force, may be driven through the double capillary system of the intestines and liver, and be made to flow out of the veins in full stream, is sufficiently conclusive to show, that in the living subject, the action of the heart might suffice to propel the blood through the whole circuit of arteries, capillaries and veins.

Much speculation has been indulged, in regard to certain attractive forces, or affinities, supposed to co-operate in effecting circulation; such as the mutual affinities between the carbon in the contents of the pulmonary arteries, and the oxygen in the air-cells; and in the other extremity, the attraction of the tissues to be repaired, for the nutritive elements contained in the aortic terminations. Nevertheless, the doctrines of physiologists on the subject of the circulation, as commonly received and understood, claiming that the chief motive power of the blood is in the heart, are in harmony with the laws of natural science, and admit of an intelligible rationale.

The action of the heart being thus claimed by her predecessors, as the chief motive power of the blood, effecting circulation by a process which has been clearly explained, and is well understood, Mrs. Willard claims that "the chief motive power of the blood is in the lungs, and not in the heart;" and in her "epitome," has added, by way of "explanation," that "a portion of the water in the blood is there changed to vapor, and the volume of the blood becomes so expanded that it must move." If the motive power of the blood be in the lungs, it must have some point or basis of propulsive action; and this basis must be the pulmonary tissue. The effective force is claimed by Mrs. Willard, to be expansion of the volume of the blood, by caloric; the capillaries of the lungs constituting, of necessity, the boilers where this expansion is effected. Being no "mechanician," but a "mere mechanic," I feel some timidity in suggesting the inquiry, whether "action and re-action" may not be as "equal" in physiology, as in mechanics? If so, the pulmonary tissue being the seat of the expansive force, which is to propel a mass of blood, weighing probably more than thirty pounds, and the portion of fluid, to be expanded in the lungs, being contained in vessels of small calibre, with coats of extreme tenuity; and these vessels being embedded in a congeries of mere air-cells, also of extreme tenuity; the thirty pounds of blood requiring to be urged onward with an impetus that may overcome for-

midable obstacles in every direction; what will be the effect of this expansive force on the vascular and cellular tissues of the lungs? Do these tissues afford an adequate base, for sustaining the re-action of all this propulsive power? It may be fancy—but my own perceptions are teeming with frightful visions of bursting boilers, and gushing crimson!

What is the rationale of Mrs. Willard's process? Notwithstanding the "epitome," she leaves us to *contrive* the answer. Is it moved from the pulmonary capillaries, to the opposite system of aortic terminations, by the process of evaporation; "where it is condensed by the effect of the external air," and returned to its starting point, like the dribbling of the pot-lid, into the boiling vortex below? Or do the successive portions of blood, heated in the capillaries of the lungs, make their way in serial order, through the denser mass which occupies the heart and large vessels? But here, a formidable obstacle, in the law of gravitation, is interposed, in the fact that the position of the different portions of the blood, in relation to each other, would render such interchange of occupancy impossible. Will a fluid *rise* through a medium less dense than itself; or *fall* through one more dense? Admit the possibility that position might interpose no obstacle to its progress, to the cavities of the left heart; to the arch of the aorta; would it plunge through the descending aorta, and the femoral arteries, to the pedal extremities? If so, it must be in violation of the laws of gravitation, to which the blood of the living body, in the relations of its different portions to each other, is no less amenable than the turbid waters of the Mississippi. Does "caloric," by rarefying the capillary portion, propel the aggregated columns of blood, contained in the entire vascular system, onward in its circuit, like the agency of exploding powder in the breech of the musket? Then, manifestly, to say nothing of the inappropriate material constituting the barrel, nor of the complex disproportions of its calibre—the breech should not be made of sponge cake! If the blood had neither weight nor dimension, like hypothetical nervous fluid, or were resolvable into a medley of partialities and antipathies, possibly we might construct a "piece of apparatus," with complications of positive and negative poles, that would elucidate the misty rationale of Mrs. Willard's theory. Unfortunately, the blood has palpable materialism, and abounds in downright heaviness. Dead or alive, it has no active mood, but is utterly passive. It will not move, though it may be moved. The motive power must appertain to the lever, and not to the weight; to the pack-horse, and not to the burden.

The *burden* of the ponderous flood, which fills and sustains the solid organism of the living body; which scales acclivities with impetuous rush, and bursts its inclosure, if an impediment interposes in its path, is no transcendental sublimation, to be wafted on the wing of a butterfly, or to be urged onward, in solid columns, by motive impotence. For what other purpose was the solid brawn of the heart provided in such munificence; and wherefore its transcendently elaborate organization? "That its beat might be made available force, in the same direction"—that it might add its little quota of impulse to the *vis a tergo* of a musquito's blow-pipe! Shade of Harvey!!

If Mrs. Willard's theory is founded in truth, "a piece of apparatus" might be furnished, for its illustration, without troubling the "Smithsonian Institution." It might consist of a human body, no matter how long dead, if organization remained entire. The vascular system, being emptied of its blood, and filled with tepid water, the air-cells of the lungs should be injected, through the trachea, with water of a higher temperature; the injection alternating with a suction pump, for its removal, in imitation of respiration; thus heating and expanding, at intervals, the contents of the pulmonary capillaries. The contents of the blood vessels should now be found coursing bravely, at every point of their circuit. Dr. Cartwright might propose to mend the experiment with a modicum of his "life;" but I counsel his fair protégé not thus to compromise the claims of "caloric," in the anticipated triumph. The doctor has become slippery, occasioned, doubtless, by the lubrication consequent on his frequent handling of alligators, in his play between "life" extinct, and "life" suspended. Don't trust him; for, truth to tell, his "life" of the blood is a less reliable motive power than her own "caloric." I am as unsuccessful as herself, in conceiving how his "life" can explain or make intelligible his rationale of the circulation.

What is life? The principle of life, regarded as belonging to the aggregate of animal matter, constituting a human body, can only be known to be present, by certain phenomena appertaining to the body, during its union with this principle; and hitherto all attempts at description, or definition of its essence have signally failed. The manifestation of the union of this "life" with the tissues of the body, may be nearly comprised in the properties of irritability and contractility; but the rationale of this union, the ultimate process by which it is maintained, or dissevered, I fear is beyond the ken of mortal eye, beyond the scope of human investigation. Thousands of instances occur where the cause of death, or the extinction of life, has eluded all the research that science and skill combined could command. The finger of God is applied, or withdrawn, and life ceases. This is the sum of our knowledge of the principle of life; and we know as little of its essence, as of the Divine existence.

But, admitting "life" to be the motive power, in virtue of its control over all the functions of the body, by which the relations it sustains to other objects may be changed; or by which the relations of its different parts with each other may be varied; still, the doctor rejects the vitality of all other tissues, and claims the "life" of the blood itself, exclusively, as the force by which it circulates. The body moves by the agencies contained within itself; locomotion is effected, and we are justified in supposing we understand the rationale of its performance. But the doctor's theory isolates the blood from all motive agencies, except its "life." Is the union of the "life" with the blood by chemical affinity? Or is it a solution; or a mixture? Is the "life" a biped or a quadruped? Is it a piston, a tractor, or a lever? Does it push, pull, or pry? The doctor will do well to make terms at once, by resolving his own "life" into the "caloric" of his fair adversary; concluding with another distinguished theorist, that "heat is life."

There have been other projectors, among whom, if my learning be not

at fault, was one Archimedes; who proposed to move the entire earth with "a piece of apparatus." Unfortunately, he just lacked a fulcrum. Modern theorists are less fastidious. If the fulcrum is at hand, very well; if not, they quietly finish their demonstration without it.

I beg the indulgence of the readers of the Journal, while I present a case of suspended animation, from my own practice, in which recovery was effected without artificial inflation of the lungs; and where the repudiated heart was the last organ to make manifestations of life, and the first to indicate its return. I do this, not for the purpose of questioning the propriety of inflation, as a means of resuscitation; nor intending to deny that it may often be indispensable to success; nor that I would now employ the means, then used exclusively, though successfully, otherwise than as auxiliary.

More than thirty years since, after a protracted attendance on a case of typhus fever, I closed my patient's eyes with my own hands, supposing him to be dead. An hour was spent in the needful arrangements for such occasions, when a friend of the patient took my arm for a walk, it being on a pleasant afternoon in September. We were soon re-called, in consequence of the alarm of the attendants, who observed, while engaged in the usual offices for the dead, slight contortion of the muscles of the face. On my return, however, the only indication of life I could detect, was the slightest possible tremor, in the region of the heart. No attempts were made to inflate the lungs, which were as quiescent as those of the foetus in utero. A large kettle of water placed over the fire, *after* the supposed death of the patient, had become heated, to boiling; its presence, perhaps, suggesting the treatment pursued; which was all comprised in enveloping the entire body at once, in thickly-folded sheets, saturated with the contents of the boiling kettle, hot as the hands of assistants could bear. The only motion given to the body, meanwhile, was lifting it on the hands, for the purpose of placing the folded sheets under it. This might have been repeated twice, or thrice; occupying, in the whole, at least thirty minutes, and probably more; making more than ninety minutes since the suspension of respiration. After this lapse of time, the tremor of the heart, previously so slight that I feared it might prove a mere illusion, became more evident; soon amounting to a distinct impulse, while the lungs were yet quiescent; but soon followed by slight convulsive struggles, speedily ending in re-establishment of respiration and circulation. To my great joy, the patient recovered, and probably yet lives.

If we claim the *skin* as the seat of the "motive power of the blood," and that circulation is maintained by the combination of caloric with that portion of blood contained in its minute vessels, thus expanding its volume; what better confirmation of the theory can be furnished than the case above cited? The skin has an obvious advantage over the lungs, in firmness of tissue, if not in extent of surface, affording a more reliable basis for sustaining propulsive force. In sober truth, the skin does, unquestionably, co-operate with the lungs, in some measure, in the process of oxygenation and decarbonization of the blood; carbonic acid, if I mistake not, being one of the products of cutaneous exhalation. May not this, and the following case, at least furnish a lesson on the folly of jump-

ing at once at the conclusion, that the world is mainly indebted to Mrs. Willard's theory, illustrated by Dr. Cartwright's, dissection of alligators, for the means of preserving health and restoring suspended life?

I beg indulgence for the egotism of the following case, as it is evidently inseparable from the *subject*. Fifty years since, on a hot summer day, with a group of school-boys, during recess at noon, I made my way from the village school-house to the banks of a considerable river, a mile distant. There were from twelve to fifteen boys, some of them good swimmers. My own purpose was to become a pupil in the art. Although the water was deep, the gradual slope of the banks and the sluggish current make *wading* practicable, I improved it, as a preliminary trial; pushing onward, as I thought, cautiously, intending to turn when the surface reached my chin, and attempt swimming to the shore. Unfortunately, an abrupt inequality in the bed of the river took me by surprise, and suddenly engulfed me.

My own recollections of that incident do not correspond with those recently published, I think, by some medical writer, in some journal or newspaper that has fallen in my way. In that case, occurring under like circumstances, the remarkable activity, and rapid process of the memory were such, that all the forgotten incidents, actions and events of a life, were re-called to the mind, with entire distinctness; occupying, of necessity, but a few moments of time in the process. In my own case, there was only a confused apprehension of my condition; flitting visions of the tumult and alarm of my associates; a feeling of hopeless isolation from all human aid; an undefinable sense of constraint and discomfort; perhaps some bodily pain, but certainly no agony, though I was conscious I must die. In my own recollection, the time seems short, after my immersion, till I lost my consciousness. My next recollections are of bodily distress, surpassing in intensity, I think, anything I have suffered before or since. I found myself on the sand of the shore, in the hands of my companions, who were rolling me over its burning surface. It was a northern shore, and had a southern declivity; and was intensely heated by an unclouded meridian sun. My sensations cannot well be defined, but it was as if my body was sustaining the weight of a world, and every rotation it made, seemed a redoubling of the intolerable agony of the pressure. At first, I was unable to intimate my wish to my deliverers, that they should desist. In due time, however, I succeeded in uttering a moan, to which they responded with joyful shouts, and redoubling their diligence in tumbling me over the sand. My restoration to life was soon completed. For what transpired during the interval of my unconsciousness, I can only depend on my recollection of the account rendered at the time, by that company of boys, among whom there were none more than twelve years old.

My associates were soon after my disappearance in the water, aware of my peril, but for a short time surprise and terror disqualified them for action. They soon rallied, however, with the feeling that *a life* must be lost unless rescued by themselves; and with the deliberation of men, formed their plan. To provide against the loss of another life in saving mine, they formed themselves into a line, those who could not swim

taking the shore-end, where a sapling afforded a sure support. In this manner, holding each others' hands, the line was extended from the sapling towards the place where I was found, on the bed of the river; my body recovered, and brought on shore. They found me apparently dead; certainly exhibiting to *them* no signs of life, the skin being cold and livid, with entire suspension of respiration. The description of my appearance, subsequently given by my associates to my father, who was a physician, though not in these terms, was in language of the same import; satisfying him that I had been thoroughly drowned. Some time was lost in devising further measures for my relief; the distance to the village, with an intervening strip of forest, precluding all hope of seasonable aid in that direction. My deliverers were earnest in commending to each other, this and that expedient, till a master-spirit, in that band of miniature men, gained the attention of his associates, by quoting from his own little store of learning, an instance of recovery from drowning, effected by rolling the body in a barrel. But the barrel was unattainable. They decided promptly that the rotation of the body, and not of the barrel, was the gist of the matter, and proceeded at once to a practical illustration. The result having been given above, I have only to add, I am indebted for my life to the resources of a boy less than twelve years old, in planning and executing, with the aid of prompt and able coadjutors, an enterprise, which in France would have been a better passport to "immortality" than to have been the author of an unproved "theory." My benefactor's name was James Jones, and he probably lives in some of the western States.

I beg the indulgence of the editors and their readers for thus occupying the Journal with these somewhat irrelevant details. And yet, may not space sometimes be afforded for the record of a noble deed; and of one, especially, which though it might have done honor to mature manhood, was nevertheless prompted by the humanity and achieved by the unaided resources of a band of tiny school-boys.

But not wholly to lose sight of the purpose of these details; in my own case, the body, being taken from the water, cold, livid, motionless and insensible, does the history of such accidents justify the conclusion that resuscitation would have been effected had my body been rolled on the *shaded turf*, instead of the *hot surface of sand*, with its declivity towards an unclouded, vertical summer sun? Admit that in the act of rolling the body, the chest might have been slightly contracted and expanded; could it have been sufficient to have made inflation a primary or "chief" item in the process of restoration? If caloric is the motive agency, operating by expanding the volume of blood in the capillaries, surely, in both cases above cited, the vessels of the skin were favored with access to motive material, furnished by the hot water and the heated sand, in sufficient abundance to effect the "expansion" of their contents, which Mrs. Willard claims to be the propulsive force of circulation. In the former case it would be madness to claim that inflation of the lungs could have preceded the phenomena which denoted returning life. Would she have the temerity to claim that the heat was transmitted through the walls of the chest, from the hot water, to the blood in the pulmonary vessels, thus effecting circulation? Inasmuch as the cutaneous

vessels were manifestly provided, both by extent of surface, and proximity to the hot water, with vastly better facilities for the expansion of their contents, than the vessels of the lungs, how will she prove that the skin in that instance, during the first moments of returning action, was not the seat of "chief" motive power? Has the organization of the minute vessels of the lungs a demonstrable peculiarity, by which it fits them exclusively for the expansion of their contents by caloric? Cannot heat be communicated to venous blood, independently of oxygen; and will it not expand it? Admitting expansion of blood in the capillaries to be the motive power, its seat could not be claimed exclusively for the lungs. It should be borne in mind that there are other processes in the animal economy, besides aeration of the blood, during which caloric must be evolved. Does not the nutritive material contained in the aortic extremities, in the consummating act of nutrition, as it escapes from the capillary, and effects coherence with its appropriate tissue, change from the fluid to the solid form; and can this change occur without evolving caloric? And why may not this constitute an equal claim, on the part of the aortic terminations, to the seat of motive power; the two poles of the circulation thus dividing the empire?

But what proof has Mrs. Willard, that the caloric evolved in the lungs is mainly expended in the rarefaction of the blood? May not pulmonary exhalation require an amount of caloric for its purposes, too large to leave anything more than the small remainder, which might be measured by the small difference between the temperature of arterial and venous blood, taken from any region of the circulation, near the aortic extremities? How much caloric does it require to evaporate an ounce of water, having already the temperature of the blood? I dare not trouble the "Smithsonian Institution" for the chemist to tell me; but I have just been reversing the process, by puffing my own blow-pipe against a window pane, in an unwarmed room, the thermometer considerably below zero—and the result is refreshing—a sheet of ice, that would convert a glass of lukewarm water into a delicious beverage.

Have the relations of the nervous system to the circulation been sufficiently regarded, in the speculations of physiologists or pathologists, in their rationale either of healthy or diseased action? There are many indomitable mysteries in these departments, that must probably find their solution in the future discovery of laws, appertaining to the nervous system hitherto hidden from scientific research.

In relation to the subject of resuscitation from apparent death, there is one fact which not only militates strongly against Mrs. Willard's assumption, that it can only be effected by inflation of the lungs, but puts at nought a goodly portion of the current theorizing on the proximate agencies, ultimate processes, or rationale, appertaining to many of the phenomena of health, disease, and even death! Many well-authenticated cases of resuscitation from apparent death have occurred, under circumstances that not only preclude the possibility that inhalation of the lungs could have been accomplished, otherwise than as an effect of returning life; but all other known or supposed means of exciting any of the actions appertaining to life, have been equally inaccessible. The

supposed victim of death has been wrapt in his shroud, his face covered, and the apertures leading to the lungs compressed with bands; the body coffined, and laid in state, where no careless footstep might cause a vibration of his narrow house, where no spoken word might break the stillness of the air, where no genial warmth might intrude. Yet here, after a long repose, in the very stillness of death, life not only unaided, but sorely encumbered by human appliances, has risen from its quiescence, and resumed its sway!

J. L. CHANDLER.

St. Albans, Vt., February, 1854.

From the Nashville Med. Journal.

Operation for Knock-Knees.

[In the proceedings of the Medical Society of Wurzburg, Dr. Mayer, of the Orthopædic Hospital, reports the following case:]

John H——, a strong and healthy-looking boy of fifteen, son of a baker, and employed in his father's business, was found, on admission into the Orthopædic Hospital at Wurzburg, to have the right leg diverging about seven inches, and the left about eight, from the direction of the corresponding thigh.

On the 14th of August, 1851, the lad having been put under the influence of chloroform, Dr. Mayer made an incision beginning three quarters of an inch below the insertion of the ligamentum patellæ, and curving downwards so as nearly to surround the front and inner, (or mesial) side of the head of the tibia. He then turned the flap upwards, and divided the periosteum in the line of the first incision, and afterwards with Heine's cutting-needle separated the periosteum from the outer and posterior surface of the tibia, so as to prepare for the use of the saw. To protect the soft parts in that situation during the sawing, a strip of watch spring, about half an inch wide, was introduced between the denuded bone and the periosteum. Dr. Mayer, then, with a round saw, made two incisions converging towards the posterior part of the tibia, and meeting about a line and a half from the surface, without therefore quite cutting the bone in two.

The wedge thus excised was about five lines thick at its base, and was easily removed by the forceps. The wound was cleared of bone dust by forcible injections of cold water, after which, through the flexibility of the remaining isthmus of the tibia and the mobility of the fibula, no difficulty was found in bringing the cut surfaces of bone into close opposition. The outer wound was brought together with the greatest accuracy by needles and ligatures, (as for hare-lip,) the hemorrhage being quite inconsiderable. The leg was then put into one of Boyer's hollow splints, used for fracture of the patella.

Half an hour after the operation, as through the perfect apposition of the divided parts no discharge of any kind was visible, the wound was covered with a thick layer of collodion, and upon this drying the ligatures and needles were removed. The traumatic reaction was very slight,

and on the fourth day the external wound (five inches long) had perfectly united. The leg was now left quiet in the splint for twenty-three days, when Dr. Mayer had the pleasure of finding that the incised surfaces of bone had united also. The next day the patient was allowed to walk in his room with crutches, and a few days afterwards in the garden without any artificial support whatever.

On the 3rd of October the other leg was operated on in the same manner and with the same success. He left the hospital, free from deformity, and with a firm and natural gait, on the 19th of November. — *Lancet*, June 18, 1853, p. 557.

From the Medical Examiner:

On a Substance found in the Brain and Spinal Marrow of Man, presenting the Chemical Reaction of Cellulose. By R. VIRCHOW. (Archiv. f. Path. Anat., VI. 1.)

It is well known that Charles Schmidt was the first who noticed in the Ascidians, as a constituent of animal tissue, the "cellulose" which previously had only been observed in plants. The researches of Kölliker, Lowig, Schacht, and Huxley, soon confirmed this important discovery. Thus, although cellulose was proved to exist in the animal kingdom, its occurrence was confined to but comparatively a low class of the invertebrated animals, and the further discovery, which Gottlieb made in the *Euglena viridis*, viz., that this infusorium contained paramylon, a substance isomeric with starch, did not much advance our knowledge of the prevalence of the cellulose, as it also had reference to a creature from the lowest classes of the animal kingdom. In the vertebrated animals nothing similar had been met with, and it needed the discovery of Bernard, that the liver generated sugar, to remind us of the fact that perhaps the starchy substances, too, might have their representatives in the higher classes of the animal kingdom. In a histological point of view it has often occurred to me that the umbilical cord in man possessed a great similarity in its structure to the cellulose in the Ascidians. (See Wurzb. Verhandlungen, 1851, vol. ii. p. 161, note.) And I was the more confirmed in this idea by Schacht's observation, so that ever since my researches have been more carefully directed to this subject. But in most instances I searched in vain, as in the ova of amphibia and fishes, the peculiar yolk-plates of which I described. (Zertschrift für Wiss. Zoologie, 1852, Vol. iv. p. 240.) I was more successful, however, recently, when I directed my attention to the so-called "corpora amylacea"* of the brain, of the exact nature of which, as compared with the other starch-like bodies in man, I had not been able to form any very definite conclusions. I soon found that on the application of iodine they soon as-

* These corpora amylacea are small yellowish bodies, not unlike starch granules. They were first mentioned by Purkinje, and are found mainly in the walls of the ventricles and medullary substance of the chord.—Tr.

sumed a bluish tint, and in subsequently adding sulphuric acid, the exquisite violet color, which is known to belong to cellulose, and which appeared the more intense as it formed a distinct contrast to the yellow or brown nitrogenous substances around it. I have so frequently repeated these investigations, and with so many precautions, that I consider the results as perfectly certain. For I have instituted comparative researches not only in different human bodies, and in the most different situations, but I have allowed the reagents employed to act under all possible conditions. The best way to proceed is to follow the plan pursued by Mulder and Harting for vegetable cellulose, (see Moleschott's *Physiologie des Stoffwechsels*, page 103,) which consists in adding first a hydrated solution of iodine, and subsequently dilute sulphuric acid. The solution of iodine must not be too strong, as otherwise we are much impeded by the precipitation of the iodine; but great care must be exerted in allowing it to act properly on the substance in question. This action is generally a very unequal one, on account of the volatility of the iodine, and its great affinity for animal substances, so that it frequently happens that the edge of the object is colored and not the centre, or that in two continuous spots one is penetrated by the iodine, the other not. It is, therefore, always advisable to repeat the application of the iodine several times, without adding too much at once. If the action has been too powerful, the subsequent addition of sulphuric acid will produce a dark reddish brown color. The most certain manner to proceed is to allow the sulphuric acid to act very slowly. The most beautiful preparations, indeed, I obtained by adding a drop of sulphuric acid to the edge of the thin glass covering a preparation, and allowing it then to remain undisturbed from twelve to twenty-four hours. I have under these circumstances been sometimes able to see the most beautiful light violet blue produced. I think it, finally, necessary to mention that an accidental admixture of starch or cellulose might frequently happen, as little fibres or particles might remain adherent from the cloths with which the glasses are cleaned, which would react in the above-described manner. Every precaution having been taken, the following results may be obtained:—

1. The corpora amylacea are chemically different from the concentric spherical corpuscles of which the brain sand is composed, and with which they have hitherto been confounded. The organic basis of these brain-sand granules is evidently nitrogenous; iodine and sulphuric acid color it an intense yellow. The same is true not only of the sandy matter in the pineal gland and the choroid plexuses, but also of that of the Pacchionian granulations, and of the dura mater, as well as of the dentated plates in the spinal arachnoid. In all these parts, except in a few spots in the pineal gland, I have never obtained the characteristic blue reaction. It would, therefore, be henceforth advisable to restrict the term "*corpora amylacea*" to these cellulose corpuscles.

2. These cellulose corpuscles are found as far as my present researches go, only in the substance of the ependyma* of the ventricle and its pro-

* The term "*ependyma*" is used to designate that portion of the lining of the ventricles, of the anterior and posterior cornua, which is not a continuation of the pia mater.—TR.

longations. In this I include the lining of the ventricles of the brain, and the transparent substance in the spinal marrow, described by Kölliker as the "*substantia grisea centralis*." As regards the ventricles of the brain, I have repeatedly stated that I have found them lined with a membrane belonging to the class of fibrous tissue, and covered with an epithelium. This membrane contains fine cellular elements and a basis substance sometimes of a firm, sometimes of a softer consistence, which is prolonged inwards between the nervous elements without any distinct limitation. In the deepest layers of this membrane, and in close proximity to the nerve fibres, these cellulose granules are most frequently met with, and there again more especially where the ependyma is thickened. They are, therefore, very numerous on the septum lucidum, fornix, stria cornea, and in the fourth ventricle. In the spinal chord the substance which corresponds to the ependyma lies in the middle of the gray mass, in the exact situation where the spinal canal exists in the foetus. It forms here evidently a rudiment of the obliterated canal, similar to the obliteration of the posterior cornua of the lateral ventricles, so frequently met with. In transverse sections of the chord this substance is easily recognizable as a gelatinous, somewhat resistant, but easily isolated mass, the cells of which are much larger and more perfect than those of the cerebral ependyma. But as these cells have been already accurately described by Kölliker, I need not here mention them further. This "*spinal ependyma*" forms a continuous gelatinous filament, which extends to the *filum terminale*, and might, therefore, be more suitably described as the *central ependyma* filament. In it, also, we find cellulose granules, but more frequently, it seems, in the upper than the lower portion. In all other situations I have as yet looked for these cellulose granules in vain, and in particular have I been unable to detect them in the cortical layer of the brain, or in the interior of the cerebral substance.

3. As from the experiments of Cl. Bernard, who produced sugar in the urine of a rabbit by wounding the fourth ventricle, there was reason to suppose that this fact might be connected with the existence of cellulose, I examined the brain of the rabbit carefully, but in vain. I found here in the fourth, as well as in the third and in the lateral ventricles, a beautiful pavement epithelium with long cilia, but no cellulose.

4. The cellulose granules seem hence to be connected with the presences of the ependyma substance in certain quantities, and might not improperly be considered as a part of it. But how they are produced from it, it was impossible to recognise. They are unusually minute, scarcely corresponding in size to the nuclei of the ependyma. Can they originate from these? The larger they are the more distinctly laminated they appear. But they do not exhibit anywhere a nitrogenous admixture, distinguishable by its yellow color. Their centre only is generally of a darker blue, and hence, perhaps, denser than their border.

5. The supposition of these bodies being introduced from without is the less probable, because a similar substance is nowhere else known. The cellulose in plants exhibits a number of varieties, but this animal cellulose is distinguishable above all by its slight resistance towards reagents; for concentrated acids and alkalies act on it more powerfully than on vegetable cellulose.

6. In the child I have searched for this animal cellulose in vain, so that, like the brain-sand, it seems to appear in a later stage of development, and may, therefore, perhaps have a pathological import.

Since writing the above, I have repeated and confirmed these observations, and have ascertained in addition, that similar bodies exist in the higher nerves of sense. I found them most abundant in the soft grayish interstitial substance of the olfactory nerve, less frequent in the accoustic, although Meissner's observation (vide Zeitsch. f. Nat. Med. N. F., Vol. iii. p. 358, 363,) would seem to indicate in their situation a proportionately great disposition to their formation. In the optic nerve, Rokitansky appears already to have observed them, and Kölliker informs me, in a novel communication, that he has met with them in the retina. As above-mentioned, the ependyma is prolonged without distinct boundaries between the nervous elements. In the higher nerves of sense, too, I found a continuous extension of a similar substance in the interior of these nerves. This fact, taken in connection with a number of pathological observations, the details of which will be given another time, compels me to infer that a soft substance, in the main belonging to fibrous tissue, transverses and connects everywhere the nervous elements in the centres, whilst the ependyma is only the free portion extending over the surface of the nervous elements. The opinion that the epithelium of the ventricles is situated immediately on the nervous elements seems to have been based on a confusion of the interstitial substance with the nerve substance proper.

I have as yet not been able to isolate the corpora amylacea in sufficient numbers to subject them to a chemical analysis, yet no doubt can possibly be entertained as to their cellulose nature. No other substance is known which reacts in the same manner, and although I have tested the most various animal tissues, and examined all the other concentric bodies that I have met with lately, (as those in the thymus gland and in tumors,) I have found nothing similar. Although it would be very desirable to have a direct proof by analysis, that these bodies contain no nitrogen, we can yet, even without further evidence, consider their analogy with the vegetable cellulose as a settled fact.

From the New Jersey Medical Reporter.

The Speculum and its modifications—its importance in the treatment of Diseases of Females, with some cases illustrative. A Lecture delivered at the N. Y. Preparatory School of Medicine, by AUGUSTUS K. GARDNER, M. D., Instructor in Obstetrics and Diseases of Females—one of the Committee on Obstetrics, &c., N. Y. Academy of Medicines, &c. &c.

Within the last few years, a very great change has taken place in the treatment of the diseases of females. Even the nomenclature has been changed, and terms that were once indicative of diseases, are now considered as designating symptoms only. In the same manner that the telescope analyzes the milky way, the speculum has made clear to us what

was once hazily considered to be a disease denominated *Leucorrhœa*. The scalpel of the dissector evinces that Dropsy is not a disease, but the symptom—often the fatal one—of other grave, frequently remote, organic changes in the system. Dropsy is no longer known among the educated as a disease. *Leucorrhœa* now shares the same fate; it is but a generally trivial and unimportant symptom of other serious trouble.

The speculum uteri has been found among the ruins of Herculaneum, where it was buried A. D. 79, and where, till recently, it remained, without any account of it left in any manuscript, to lead us to suspect its use, unless we except Morgagni's doubtful allusion to it. It was, however, re-invented in 1816, by Recamier, (deceased in 1852,) and its introduction into practice has shed a flood of light upon the diseases of females. Formerly, I saw it much employed in Paris, not unfrequently upon eighty women a day, and although it was then used very indiscriminately, and, as experience has subsequently shown, often very unnecessarily and sometimes injuriously, I was firmly convinced of its utility in many cases. On my return to this country, I brought with me this instrument, and have never ceased using it in dispensary and private practice, with marked utility to myself in the diagnosis of diseases, and of unquestionable benefit to numerous patients in their treatment.

Since that period, this instrument has come into general use, and I may add, into frequent abuse.

But there are still many who deny its utility,—not in cases of syphilis or cancer, where tumors exist, &c.—cases where generally it is either useless or impossible to be advantageously employed—but in cases of continued *leucorrhœa*, *menorrhagia*, abortion, &c. Now, I propose in this lecture, to give my opinion upon the character of cases in which this instrument is applicable, and, as I may chance to remember, will illustrate my remarks by cases from my own experience.

There are several varieties of persons who oppose the use of this instrument. 1. Those who cannot see—and we will not endeavor to convince them of its utility.

It is impossible to view the os uteri with the speculum in one hand, and an eye-glass in the other. So it is also equally impossible, with an ultra-squeamish patient, whose last thought is to accommodate herself to the necessary requirements of the medical attendant.

2. Another class is found in those whose early essays in introducing the speculum, did not result in bringing the os into view. They saw nothing, and think no one sees anything. Not unfrequently where the amount of the disease is greatest, there is most difficulty in “finding the os.” Notwithstanding the familiarity acquired by constant practice, I am not unfrequently compelled, rather than continue too long a sometimes painful manipulation, to arrest the examination without getting the hypertrophied or retroverted os into the field of vision. Indeed it is a matter requiring far more tact and experience than is generally supposed, or than one would imagine was required.

Not a little of the facility of making an examination depends upon the instrument which is employed. The variety of these are very numerous. That in commonest use—the glass, lamp-chimney species—is almost

valueless. It is unpleasant to introduce, being very painful in the commencement of its introduction. This objection is trivial with prostitutes and multipara. When it arrives at the end of the vagina it often passes anterior or posterior to the cervix; but if it displays the womb, if there be any deviation from its normal position, not the os but the cervix only is visible, and often no means will bring the os into view. Should the os be made visible, often the orifice of the speculum is not sufficiently large to admit a view of one half of the indurated and hypertrophied organ.

The quicksilver lined instruments are open to the same objections, but as they concentrate the light strongly upon the exposed part, they are in some slight cases, of utility.

The old fashioned three valve metallic speculi are an improvement upon the former instruments, but they have the same disadvantage of distending the external, rigid parts to an equal extent with those interior; which not only limits their use, but also is not unfrequently unnecessarily painful.

The speculum of Ricord, with two blades, which opens widely interiorly, while the size of that portion within the external genitals does not enlarge, but rather diminishes, as the instrument is opened—is the greatest improvement it has yet received. The only fault in this is, that when distended, the lax walls of a flaccid vagina will fall together within the blades, and obscure the vision. To remedy this defect, Charrière, the ingenious Parisian cutler, has added a superior and osterior blade. And this four bladed speculum is without question, the only speculum ever needed, applicable to every case, and of immense importance in treating these diseases. It has the advantage of being of easy entrance—it greatly dilates the posterior portion of the vagina, permitting the os uteri to fall within the blades almost of its own accord; it also draws aside the lips of the os uteri, permitting a limited view of the cavity of the os itself.

The blades of this instrument are generally composed of German silver, sometimes silvered, or gilded. When gilded they are not subject to rust or corrosion, but the altered hue, which by reflection is given to the parts, renders this form objectionable. When silvered, they are less liable to corrosion from the effects of acids, and the reflection is increased; but they are somewhat more costly, and the silver coating is not of permanent duration. It is highly desirable that some convenient method be found for removing the dark stains which soon much injure the utility of the instrument.

Besides these instruments, ivory cones, of formidable dimensions, are used, where the actual cautery is applied, on account of their non-conducting qualities. Herteloup's speculum, intended to allow the sides of the vagina to be seen and operated upon if necessary, is not any more convenient than the four bladed instrument already mentioned. The wire speculum composed of firm strait wires, radiating from a centre, is no improvement upon this instrument. There are various modifications, other than those I have mentioned, but they are of little importance. The instrument is, however, constructed of various sizes to suit the dif-

ferent ages and conditions of life—those for use where the actual cautery is applied, are large and only applicable in the large vaginas of child-bearing women; while those used for virgins, who occasionally at advanced age, or still rarer in youth, require this method of exploration and treatment, are small and delicate in their construction.

In some cases, instead of the speculum, spatulas—much resembling the tongue spatulas—are used to draw down the perineum, and thus to expose an enlarged or prolapsed organ.

Now the cases in which this instrument is of use, are quite numerous. In recto or vesico vaginal fistulas the speculum may be of service, although in general the spatulas are the more serviceable instruments in the hand of an assistant. In a very rare case of vesico uterine fistula, which I lately saw in the practice of my friend and coadjutor, Dr. H. W. Brown, where the urine flowed through a fistulas opening into the uterus, and thence made its exit through the uterus into the vagina—the fistulous opening could only be discovered by drawing aside the labia, by means of spatulas, and pulling down the uterus into sight, according to the plan recommended and practised by Jobert of Paris.

Dr. J. Marion Sims, now of New York, and late of Alabama, one of the most distinguished of American Surgeons, has recently shown me a new spatula—if it can have that name—of his own invention, which was invented from necessity, (*ex necessitate rei*) to supply a want in his own unique operation for the radical cure of vesico vaginal fistula. It might perhaps be called a levator perinei, for in his operation, the patient being placed upon her hands and knees, the perineum is raised up by this instrument, in the hands of an assistant.

Besides this instrument, Dr. Sims was kind enough to show me a model for a speculum upon a new plan, possessing some peculiarities of marked utility. In its present unperfected state, I am not justified in making, perhaps, even this casual allusion to it. I do it however, partially, for the opportunity of incidentally giving my testimony to the very elevated opinion I entertain of the man, and the entire success of his operation in one case which I have been permitted to examine.

(To be concluded next month.)

From the Western Lancet.

Putrid Gas in the Veins.

M. Maisonneuve has recently laid claim, before the Academy of Sciences, to having discovered the fact that in cases of violent gangrene, *gangrene foudroyante*, a putrid gas is developed in the veins, capable of determining instantaneous and fatal intoxication. This accident takes place ordinarily as the result of fractures complicated with flesh wounds. M. Maisonneuve observed it for the first time in 1851. Since then he has had several opportunities of demonstrating the truth of his discovery. Putrid gas has been detected flowing in the veins between the gang re-

nous part and the heart, and death almost immediately follows this event. Four months ago, M. Maisonneuve thought he detected, one morning on removing the bandages from above and about a gangrened limb, the symptoms of intoxication from putrid gas coming on; he cut into a vein at the bend of the elbow, and some spumous blood jetted out; instantly, with the instrument which he held in his hand, he commenced the amputation of the arm, while he sent his assistants on the run in every direction for the instruments and appliances necessary to complete the operation. He saved the life of his patient; and he believes, without the operation, he would have been dead in a few minutes. Messrs. Malgaigne and Chassaignac have already claimed priority in the discovery; but M. Maisonneuve shows, by their writings on the subject of *gangrene foudroyante*, that the first gentleman speaks only of cellular emphysema as the result of traumatic gangrene, while the other speaks of death in these cases being "explained by the sudden decomposition of the blood." But of the nature of that decomposition he says nothing. M. Maisonneuve therefore repeats the proposition on which he claims priority, in these words: "The discovery consists in this, that in a certain form of gangrene, well known to surgeons, and which I designate under the name of *gangrene foudroyante*, (gangrene terrible), putrid gases develop themselves spontaneously in the veins, and circulate with the blood during the life of the patient." M. Maisonneuve's researches have placed the truth of this fact beyond all doubt; I have seen him once myself demonstrate the fact in his wards, to the satisfaction of all present. That this putrid gas once developed in the veins will produce speedy death, is obvious enough, and explains rationally why death in these cases is so often sudden.

EDITORIAL.

In commencing the second volume of *the Peninsular Journal of Medicine and the Collateral Sciences* under somewhat new auspices, it seems fitting to address a few words to our readers respecting our past history and efforts, and our present intentions and prospects.

Of the past however, we have but little to say. The Journal made its appearance in obedience to a call from the profession.

The Editor of the preceding volume has done what he could with the means and facilities within his control; and the results of his efforts are before you. It may not be improper to say that amidst the embarrassments consequent upon commencing such an enterprise—the difficulties of obtaining funds, establishing exchanges, securing correspondents, and becoming accustomed to his position, he has been cheered by the prompt

pecuniary responses of most of his subscribers, the kind approval and encouragement of the State Medical Society and of individual friends, and the favorable expressions of many of his cotemporaries. To all of these he returns his thanks.

Though we have not as large a subscription list as we *must* have, the Journal may be considered as established. The profession of Michigan (though we do not intend to confine it to our own State,) have an organ. Its pages are open to accounts of the proceedings of all local societies, and to communications from individual members of the profession, so far as is consistent with our space and the general interests of our readers—and we intend so to keep them, giving a preference to such accounts and to original home productions, for the double purpose of encouraging a more complete organization of the profession throughout the State, and the recording of the thoughts and experience of individual members, thereby preserving an amount of valuable knowledge that might otherwise be lost, and producing in those who write, habits of closer observation and more precise and accurate thinking.

We also hope to make the Peninsular Journal a medium of communication between the graduates of the medical department of the University of Michigan and their Alma Mater, affording each an opportunity of recording a portion of his experience, of indicating his professional development, and of profiting by the experience and observing the progress of those of his brethren with whom he has been associated in his earlier medical studies. From the habits of composition formed by the University requiring of the graduating class the writing of theses on medical subjects once in two weeks, we shall hope in the future to have a corps of contributors which will do honor to themselves and enrich our pages.

Our selections as heretofore will be made with great care, and we intend shall embrace all that is new and of greatest interest in the profession and the sciences relating to it. In order to accomplish this, condensation of articles, giving the important ideas and the conclusions of the authors, may be necessary.

The editorial department we intend shall not be neglected. Upon the subject of medical education we shall contend for the importance of physicians admitting into their offices as students of medicine none who do not possess a competent preliminary education and a good intellectual and moral character. We shall also contend for an extended and thorough course of instruction in our Medical Colleges, and a high standard of acquirements for admission into our ranks.

Being ready to oppose as we may deem most judicious, every species of imposition and quackery, we shall do what we are able to promote the organization, the harmony and the advancement of the profession.

The current medical news will be given, and new works will be carefully examined, and such notices and reviews made of them as they shall seem to demand.

In the admission of original articles—in selections and editorials we intend to give prominence to subjects bearing upon the peculiarities of prevailing *western* diseases and their treatment, thus adapting the Journal to its locality and endeavoring to make it peculiarly and practically valuable to the profession of the West.

Our bearing towards our cotemporaries we propose shall always be respectful and just—and whilst zealously endeavoring to defend and maintain the right, we shall guard against having anything unnecessarily personal or vituperative pollute our pages—and upon all questions coming within our province we hope ever to be found upon the side of reform, of humanity and truth.

We are aware that these expressions of intentions and hopes are of little value, compared with their being followed by corresponding performances and realizations; but in appealing to the profession, as we now do appeal to it for support, it is but just that some intimation should be given of the general course to be pursued; and if the profession of Michigan and the West will suitably respond to our efforts, we feel a great degree of confidence that our intentions will be carried out and our hopes realized.

Our Second Volume.

We now enter on the second year of our Journal. For the kindness of those who have hitherto sustained us with their pens and their subscriptions, we offer our cordial thanks, and earnestly solicit a continuance of their favors.

We have the pleasure of announcing to our readers the accession of Prof. A. B. Palmer to the editorial corps, with whose pen they have already become acquainted through our pages. It is not necessary for us to enlarge on the value of such an addition to our number; suffice it to say that his well-known standing and reputation is a pledge to all, that by our united efforts, the coming volume will be made much superior to the first, in which we sustained the editorial burden alone, and had to

battle single handed with the innumerable difficulties which attend and embarrass the first year of such an enterprise.

We bespeak the attention of our friends also, to the fact that Messrs. Pomeroy & Co. having provided new type, and at great expense obtained some splendid new presses, the mechanical execution of the work will be also greatly improved, and the care and energy of those well-known publishers, will be freely spent to issue it in the best of style.

We send with this number a title page and index of volume first.

We find that in places not on the principal lines of travel, the mails for some reason frequently fail to carry the Journal. We shall do our utmost to obviate this evil; meanwhile, if those who fail to receive it, will notify us, we will promptly send on again the missing numbers.

We beg leave to remind our patrons that prompt payment for the coming volume is requisite to enable us to prosecute the work with energy and satisfaction to all parties, and we doubt not that this fact will be considerably borne in mind by all.

In summing up the work of the year, we congratulate our readers on the rapid improvement of the profession of this State, in respect to its organization,—that pressing want which this Journal has labored with special anxiety to remove. We have now a State Medical Society, and at least five local societies, all in energetic activity, not by virtue, it is true, of legislative charters, but what is far better, by their own internal force and vitality; that life of *individualism in combination*, which legislative charters can neither create nor their repeal destroy. In consequence of this advancement, we find by a general survey of the field, that the profession, as a body, occupies now a perceptibly higher and more dignified position before the public, than it did one year ago. We now begin to be known as an organized body, who not only pursue the round of our separate individual duties, but who meet together, exchange thoughts, lay plans, and prosecute investigations in connection, for the welfare of community.

To the accomplishment of this high advance, we are proud to believe that the Journal has contributed in an honorable degree;—the existence of the Journal, indeed, was a necessary means to the end. In reference to this work, we take this opportunity to remind the members of the various societies that organization is not an *end* but a *means*, and that we are not to rest satisfied with having societies—they *must do something*—they must operate in investigating, planning, *executing* measures for the advancement of science, the intercommunication of knowledge, and the

defence of community from impostors. In accordance with this idea, we shall hereafter pay more of our attention to the work of diffusing knowledge, not indeed neglecting the work of organization, but having broken the ice of neglect on the subject of the *formation* of societies, we conceive that the best mode of keeping them alive, and starting new ones, is to urge them to go on at once to the performance of their appropriate work, and thus by the congenial fellowship, which always springs up among those who prosecute science together, bind the profession into one brotherhood.

E. A.

Editorial change in the North Western Medical and Surgical Journal.

From a note in the May number of this Journal over the signature of Prof. W. B. Herrick, of Rush Medical College, we perceive that that gentleman has withdrawn from his position as senior editor of our old and established neighbor, and that his place is hereafter to be supplied by Prof. N. S. Davis, of the same school.

However much we may regret the loss of so able and courteous a man as Dr. Herrick from the editorial fraternity, we can but rejoice that Dr. Davis, with his acknowledged talents, ready energy, and laborious habits has entered the field; and especially so as from his well known and widely published views upon the subjects of "Medical Education and Reform," we have reason to anticipate that hereafter this Journal will take high ground in favor of Free Medical Schools; of a thorough Academical preparation on the part of students; of long sessions and extended courses of instruction in our Medical Colleges; of the separating of the licence power from the hands of those who teach and have a pecuniary interest in multiplying students and graduates; and in favor of a high standard of acquirements for admission into the ranks of the profession. These objects, (excepting that of Free Medical Schools, which was urged afterwards by Dr. Alexander H. Stevens, President of the College of Physicians and Surgeons, New York, and fully endorsed by Dr. Davis, in his first introductory as Professor in Rush Medical College) were those which induced Dr. D. and the men who acted with him in the New York State Medical Society, to commence the movement which resulted in the formation of the National Medical Association; and although no general reform in these respects has yet been accomplished; but few of the schools having paid regard to the oft repeated recommendations of this body; and of late, other objects embraced in its organization having absorbed so much attention as to leave these less conspicu-

ous—yet it is the ardent wish of the great mass of the Association and the Profession, that these reforms, (certainly as much needed now as ever,) should be effected; and we hope Dr. D., as he will now through his Journal have the opportunity, will lend efficient aid in advancing these great measures, in keeping them before the profession, and urging them upon the Schools.

MISCELLANEOUS.

A member of the Serapion wishes us to state that in the list of Fellows of that Society, published in our April number, the name of Wm. J. Moody, Jr., must have been inserted by mistake of the Secretary, as the name was not brought before the Society among the candidates for the grade of Fellowship. The minutes are published as they were presented to us by the Secretary; whether this is really an error, of course we have no official means of knowing, until the Society shall have acted upon the minutes for approval or amendment.

University of Michigan.

Prof. A. B. Palmer has been transferred from the Chair of Anatomy to that of Materia Medica, Therapeutics and Diseases of Women and Children.

Prof. Ford, of the Castleton Medical School, is appointed to the Chair of Human Anatomy, and E. Andrews, M. D., to the Chair of Comparative Anatomy.

Prof. Sager has received the department of Physiology, in lieu of that of Diseases of Women and Children, which is transferred to Prof. Palmer.

Virginia Medical Journal.

The prospectus for the coming year of this work is before us. Dr. J. F. Peebles, of Petersburg, Va., has been added to the editorial corps. It is a valuable Journal. Terms: \$5 per year. Published at Richmond, Va.

Albany Medical College.

The Catalogue of this honored institution is before us. The graduates of the last session were fifty-four in number. The second session of the year opened in February.

By some fault of the mails we have only just received this exchange. It teems with useful articles, and denotes a healthy profession in the section that supports it. Published at Plattsburg, N. Y., and Montreal, C. E.

MR. EDITOR. — Please publish in the next number of your Journal, the following "Errata," as having occurred in the article, in the last number, styled, "Report of a case of Paralysis at the Ste. Marie's Hospital":—

Page 553 6th line, for "exerting," read existing.

" " 26th " " "nemal." " neural.

" " 34th " " "their," " these.

" " 36th " " "extreme." " existence.

By making these corrections, the sense will be rendered more apparent, particularly in that in which the last error occurs, which as it now reads, is as unintelligible as a "spiritual revelation." Yours, C.

THE
PENINSULAR
JOURNAL OF MEDICINE
AND THE COLLATERAL SCIENCES.

VOL. II.

AUGUST, 1854.

NO. II.

ORIGINAL COMMUNICATIONS.

ART. I.—*Case of Monstrosity.*

TO THE EDITORS OF THE PENINSULAR JOURNAL OF MEDICINE.

Gentlemen: On the 8th of May last I was called out about four miles from this city to attend to a case of accouchement where some difficulty was encountered by the midwife in attendance.

The patient, Mrs. C——, a young married woman, only seventeen years of age, and good looking withal, had been in labor from 10 P.M. of the previous evening. At the time of my arrival there was no uterine action, the pains having ceased at 6 A.M.

On making an examination, per vagina, I found the child completely jammed in the outlet of the pelvis, with a right and left foot protruding externally, Nos. 5 and 6 of the woodcut, a right hand, No. 4, just within the external parts, a face abutting against the pubis, No. 2, and a whole plexus of arms and legs, so interwoven and laced as to place me in a pretty predicament of sweet confusion; and, last of all, I could find neither a neck nor a semblance of a head. On running my hand along the side of the infant, from the trochanter of the leg, No. 6, to the axilla of the arm, No. 4, the distance seemed so short as to astonish me. I however conjectured, all things considered, that it must be a Twin conception, bound together in some very abnormal manner; and as there seemed to

be plenty of room for my hand to go round the object, so far, and although there was a slight discharge of blood, nothing else very urgent in the case, I concluded that it would be best, before resorting to instruments, the attempt at turning having failed, to use gentle dilatation with the hand, for the double purpose of widening the opening and exciting uterine action, which very soon had the desired effect; for, shortly after two or three more explorations, to make sure of the position of the children, and a few gentle dilatations of the os uteri, strong uterine action came on, and another arm, the one under No. 2, was expelled. I had thus the strange and before unheard-of presentation of a face, two arms, the whole front of the body, and two legs, and, shortly afterwards, a small portion of the placenta, which was protruded between the right side of the vagina and leg, No. 6.



1. The Posterior Fontalles, with the apophysis for Brain, seen protruding.
2. The Face which presented.
- 4, 5, and 6. The Legs and Arm which first presented, the arm under No. 2 coming down afterwards.
- 3, 8. The Spinal Column, symmetrical, with the opposite side.

Very soon afterwards, the whole mass, as seen in the woodcut, was expelled by one pain, an hour after my arrival, at 10 a.m. Neither of the bodies ever respired; in fact, I think the placenta must have been detached and the children dead some time previous to my arrival.

The heads and bodies are so completely amalgamated as not to shew even a line of demarkation, the only separation occurring where the posterior fontanelles ought to be, where there is an oval opening through which is seen protruding a fibrous mass which has none of the appearance and is only an apology for a brain. The head or heads are very flat and are covered with dark hair behind the ears on each side. The spinal columns run down from 3 to 8 on each side, where ribs ought to be, and, apparently, form two distinct backs, the position of the legs and arms, and an anal orifice on each side, immediately under No. 8, giving them the finishing stroke. On one side only, and just inside of the anus, was there the slightest appearance of sexual organs, and that only a small white, fleshy, undistinguishable pimple, about the size of a pea, neither penis nor clitoris. There is no pubic portion to the pelvis on either side, and the femurs of all the lower extremities are attached and jointed in an acetabulum formed of the merest rudiments of portions of the pelvis. The space which ought to be a perineum is a large square opening entering the abdomen, through which the intestines, liver and placenta are suspended. There are no placental cords, the whole placenta seeming to be attached merely by the vessels, a single abdominal aorta and vena cava, and a large continuation of peritoneum, which is seen descending along with it at 7.

The whole of the limbs are perfect and beautifully formed, not a nail, a finger, or a toe being found wanting.

The whole mass weighs about 9 pounds, the placenta forming, I should say, nearly one-third of this weight.

The woman says she was at her full time, and from the answers she gave me on cross questioning, I am inclined to believe her.

The following are the measurements of the body:

Head of Humerus to tip of Mid. Finger	7 in.	Humerus to Humerus	4 in.
Do. to Olecranon	2½,,	Girth of Body	12½,,
Olecranon to Wrist	2½,,	Sinciput to Chin or Lip, (there is	
Trocanter to Patella	3½,,	scarcely any chin, and no neck	
Patella to External Malleolus	3,,	whatever.	2½,,
Heel to point of Large Toe	2½,,	Sinciput to Chin, opposite side	2,,
Humerus to Trocanter	3½,,	Girth of Arm, upper Humerus	3½,,
Sinciput to Sinciput	5,,	„ of Thigh, upper Femur	4½,,
		„ of body and Humeri	14½,,

The whole of the limbs are symmetrical.

I am indebted to Mr. M. Sutton, Artist, of this City, for faithful Daguerreotypes of it with which he took much pains. Five excellent views of it were taken, from the best of which the well-executed and

truthful wood engraving was made by Mr. Geo. P. Conklin, Engraver, also of this place.

The specimen, procured after much trouble, five days following the occurrence, is now in a good state of preservation, and is open to the inspection of my professional brethren throughout the State, who may be curious in matters pertaining to Embriology.

Yours faithfully,

WILLIAM COWAN,

*Member of the Faculty of Physicians and Surgeons
of Glasgow.*

Detroit, 11th July, 1854.

ART. II.—*Narcotism from Coffee.*

December 25th, 1852. Mrs. R., aged 36, housewife, nervo-sanguine, slender, has had a quartan for three months past. Obtaining temporary relief by quinine and other treatment, she thought to take the management of the case into her own hands. Some friend had advised coffee as a sure cure; she began with that. The time for the ague was early in the evening. She began to drink coffee at noon, preceding; the girl says she "took all of two quarts" "very strong," "bitter as wormwood," that she "boiled a large coffee cup full of ground coffee, and Mrs. R. drank all of it." I found her at 7 P. M., delirious, skin hot and dry. head hot and painful, excited pulse, tongue moist, nausea and retching. distended abdomen. She declares she is not bloated, but the attendants say, that she has complained much of her clothing being tight — that they had loosened it considerably — that it had almost burst off itself.

The patient expresses only a desire to sleep; if she could only "rest a little," she would be well enough. Gave a full draught of warm water to clear the stomach, followed by a spoonful of solution sup. c. soda every hour. Cold napkin to the head, to be changed or removed as heat or chilliness may indicate. Room dark and quiet. Patient went to sleep soon after vomiting; next morning she had some looseness of the bowels and headache, but no other special symptoms from the coffee. The ague omitted two paroxysms, and then came on again.

York, June, 1854.

H. W. C.

ART. III.—*New Plants.*

DEAR DOCTOR:—I sent you a few days ago, a description of a new species of *Phacelia*. Since that time I have discovered one or two other new plants, of which I now send you a description. The following is a very beautiful species:

Herpestis aurea (mihi) stem, stout, decumbent, glabrous, purple, upper leaves sessile, or nearly so, lower leaves short petioled, cordate, crenate, dentate, obtusish, strongly five ribbed below. Calyx plicate, upper division ovate, and much larger than the rest; calyx shorter than the peduncle, and much shorter than the corolla. The peduncle and calyx are both somewhat pubescent; corolla, bright golden yellow, about five lines long; caducous, springy places along the Mississippi, June 13th.

The next species is not entirely new, since it is described by Eaton and Wright, as belonging to the Rocky Mountains; but as I am not aware of its having been observed so far east as this, and the description does not appear to me to be sufficiently full, I submit a new description.

Claytonia aquatica, stem decumbent, stoloniferous, leaves numerous, opposite spatulate or oblong obovate, attenuate below, obtusish, rather thick and fleshy, racemes axillary, and terminal, peduncled, simple, and few flowered. Petals ovate entire, about three times the length of the calyx. Corolla, pearly white; four or five lines in diameter; very wet, springy places along the Mississippi, June 13th.

Yours, with respect,

JOHN C. NORTON.

Minneowah, M. T., June 14, 1854.

ART. IV.—*Local Anæsthesia by Chloroform. Failure, Disappearance of the Patient.*

Having read the accounts in the Peninsular and other Journals of the power of Chloroform topically applied to produce local insensibility, I determined to embrace the first opportunity to try it, and if successful, as I doubted not I should be, I was resolved to devise means of using it thus in every case where it was possible, and thus diminish the risk of having a patient drop from my hands into the grave, in the sudden and appalling manner which sometimes occurs. The first case which I deemed a proper one, came under my notice last December. The patient

came into my office limping, and on withdrawing his boot, showed me one of those common cases where the nail of the great toe grows into the flesh so as to produce a very painful swelling, rendering walking and the wearing of the boot intolerable. After examining it, I recommended the operation which has latterly come into use for such cases, viz: slicing off the projecting mass of flesh from the side where the nail was imbedded. The patient inquired if it would hurt? I informed him that it would. He then asked advice about taking chloroform. I told him that for so slight an operation it was not advisable to run the risk of taking it internally; but that I would apply it externally, so as to destroy the sensibility of the toe alone, and thus save him both from pain and danger. I then proceeded, according to the directions which I had seen published, to produce the local insensibility. I dipped some lint in chloroform and wrapped it around the toe, and then enclosed the whole in oiled silk to confine the vapor. The results were ludicrous. In the first place, I found that oiled silk will no more confine the vapor of chloroform than a sieve will confine water, or flax fire. It crumbled to pieces almost the instant the vapor touched it. Failing in this, I took a wide mouthed vial and thrust the toe with its envelope, into it, and thus succeeded in securing a close atmosphere of the fluid around it.

I now waited with great confidence for the wished for insensibility to pain, but was doomed again to disappointment. The surface exposed to the vapor soon began to smart and burn most intolerably. I exhorted the patient to bear it coolly, assuring him that it was a sign that the agent was taking effect; that the smarting would soon subside, and be succeeded by a pleasant quietness. Thus encouraged, he bore it manfully for some time, but it still increased to such an extent that at length human endurance could bear it no longer; and in spite of my remonstrances, he tore off the coverings to get relief. I was astonished at such a result, after the accounts I had read, and still thought that it must be owing to the tender and irritated state of the skin, and that I should certainly produce insensibility if I could induce the patient to submit a little longer. With this view, I deadened the sensibility of the surface by rubbing it over with nitrate of silver, and then re-applied the chloroform. This at first worked admirably. The vapor no longer produced pain, and the patient's countenance lightened up with joyful expectation. Soon, however, the smarting began to return, but rather slowly, and I made up my mind that I should now succeed; but as time was passing away, and I had other patients to visit, I told my present one to remain quiet while

I was gone; gave him the chloroform bottle with directions to add a few drops every ten minutes to the dressing, and that I would return in an hour, by which time the insensibility would be complete, and I would proceed to operate.

After about an hour, I returned to my office. There sat the patient, writhing with anguish in his chair, still resolutely holding his toe in the vial and adding new chloroform every ten minutes according to directions. I asked him if he felt easy yet; he informed me in very explicit language that he did not, and that as had lief hold his toe in the fire. As the application had now been continued two hours, I gave it up, half provoked and half laughing at my egregious failure. I took off the dressings, and satisfied myself by examination, that the skin retained all its sensibility to external touch. I informed that patient that I had not succeeded in producing insensibility, a fact of which he was already well aware; whereupon he drew on his boot and departed, since which I have not seen him.

Whether my failure was owing to my ignorance of the proper cases adapted to such treatment; or of the proper mode of application—or whether the local anæsthetic power of chloroform is a delusion, I am not able to say. If the experience of any physician who reads this has been different from mine, I hope he will communicate it to the world; for if the local anæsthesia can really be obtained, it is a discovery of the utmost value, and should be made public, with such details as will enable all practitioners to avail themselves of it.

SELECTIONS.

From the New York Journal of Medicine.

Observations on Exhaustion from the Effects of Heat. (Coup de Soleil.) By H. S. SWIFT, M. D., Resident Physician of the New York Hospital.

Owing to the oppressive and long-continued hot-weather of the past summer, an unusually large number of cases were admitted to the New York Hospital of what is called *coup de soleil*, or, as now regarded by the profession, extreme prostration produced by exposure to excessive heats, combined, perhaps, with the effect of receiving large draughts of cold water into the system, when overheated.

So prevalent, indeed, was this disease, that at one time it was regarded

almost as an epidemic, not only in this, but in neighboring cities. Several cases occurred in the country, where, heretofore, it has seldom appeared. It will be recollected that a large per cent. of the cases were fatal. The report of the City Inspector of this city alone shows 260 deaths from *coup de soleil*, without including many cases designated as "congestion of the brain," and the "effects of cold water."

It is now only five or six years since the nature of this disease was pointed out, and yet the profession, generally, have but vague and indefinite ideas respecting it, and it is a matter of surprise that medical literature is so deficient on this subject. A few short monographs, and a few reported cures, are all that can be found in regard to it. Cases are not so infrequent, nor is this affection so devoid of interest, as this silence would seem to indicate.

I have no new theories to propose, or any new light to throw upon the pathology or the treatment of this disease; the object of this paper is simply to call the attention of the profession to this subject, more especially as the season is now approaching in which we may reasonably expect a return of this "calamity."

The term *coup de soleil* as applied to this disease, is a misnomer. It is a popular rather than a professional appellation. All our authors agree that "cerebral apoplexy" is occasionally produced by exposure to the direct rays of the sun. This I regard as true *coup de soleil*. The subject now under consideration is an entirely distinct affection. It is now almost universally admitted to be mere nervous exhaustion produced by protracted and violent exercise in an over-heated atmosphere.

Of the large number of cases observed by me, none were strictly apoplectic, and no lesions were noticed in those which proved fatal, sufficient to account for death. Those two opposite conditions—the "cerebral congestion" and "nervous debility"—require opposite modes of treatment, and should be carefully distinguished from each other.

The subjects of this affection are usually laborers who have been exposed several hours during the day to the direct rays of the sun, the thermometer being over 90°. A great majority of the following cases were foreigners, many of whom had but recently arrived in this country, and who, after the deprivations of a long passage, were ill-adapted to endure great fatigue in so high an elevation of temperature.

The same condition may result after exposure to artificial as well as solar heat. Eleven patients were attacked one morning in the laundry of one of our principal hotels; several were brought to us from a sugar refinery, where, after working several hours in a close and over-heated apartment, they fell down suddenly in a state of insensibility; and we had an opportunity of comparing their symptoms and lesions with those who became exhausted after laboring in the sun, but were unable to satisfy ourselves of any distinction.

Whatever tends to enfeeble the vital powers must be regarded as the predisposing cause. This may result from muscular debility or preëxisting disease. Heat acts as the exciting cause. One patient had suffered for several weeks from an obstinate diarrhoea. He had eaten nothing on the morning of the attack, and, after imprudently walking only

a short distance in the sun, fell down insensible. Another patient was suffering at the time of the attack, as we afterwards learned, from the usual *malaise* of fever, and after convalescing from this disease, passed through the ordinary attack of petechial typhus. Still another was in a cachectic condition from the influence of malaria. He was also picked up in the street and brought to the hospital in an insensible condition. These cases were not included in our Report, though they were evidently suffering from this disease at the time of their admission to the hospital.

An attempt has been made to distinguish those cases which are the result of exhaustion merely, and those who have been suddenly seized after drinking large draughts of cold water when over-heated either from exposure to the sun or by violent exercise. If such a distinction exists, by far the greater number of cases which fell under my observation would be included in the latter class, though only in a single instance were we able to trace any *immediate* connection. A seaman had been employed during the day, in the rigging of a vessel, exposed to the direct rays of the sun. At 3 P. M., he complained of a severe pain in the head and a "sense of sinking within him." After drinking very freely from a bucket of hydrant water, he plunged his head into it, and immediately fell down insensible. Most of the patients had been drinking water freely during the day—some moderately—while others had scrupulously avoided it. But a large majority of them were attacked immediately after dinner, when probably large draughts of water were employed.

For this reason I am inclined to believe that the effect of the cold water in these cases is merely to hasten the development of the disease, and that a majority of the cases reported as deaths from "drinking cold water," are really occasioned by "solar exhaustion." Nearly all the patients were exhausted by severe labor, and at their dinner they were just in the condition to suffer from the shock of receiving a large quantity of water suddenly into the system.

Deaths from the effects of cold water are not so frequently met with as is generally supposed. Dr. Dickson, of Charleston, S. C., says: "I have never seen a death from drinking cold water, nor have I been able to obtain any authentic account of such an event having occurred since I have been engaged in the practice of medicine in this city. Yet here, if anywhere, such accidents should occur. Immense quantities of ice and iced fluids are daily consumed here by persons subjected to the several conditions which are regarded as calculated to favor the morbid influence of the agent in the highest degree. The cases described by Rush I believe to have been generally cases of insolation, and that, being sensible of rapidly approaching disease, and at the same time feeling an internal heat, the patients were just procuring relief when overtaken by sudden death." Such, undoubtedly, was the case of the sailor above referred to.

The disease is usually stated to be confined to patients of irregular habits; but only a small proportion—at least less than one-half of the following cases—could be regarded as intemperate, and many of these had restricted themselves during the day to a single glass of ale or brandy.

The premonitory symptoms are usually slight, and of short duration. A laborer may, perhaps, have been employed until a late hour the previous night, and the next morning complains of a slight headache and a general feeling of languor. He takes his breakfast with less relish than usual, but resumes his ordinary duties. But, in the great majority of cases, even these slight symptoms are wanting. They are suddenly seized while in the performance of their labors, with a pain in the head, and a sense of fulness and oppression in the epigastrium, occasionally nausea and vomiting, general feeling of weakness, especially of the lower extremities, vertigo, dimness of vision, and insensibility. Surrounding objects appear of uniform color. In a great majority of cases, this was, so far as could be ascertained, blue or purple. In one instance, everything appeared red; in another green; and in another, white. One stated that objects retained their natural color, but expressed them as being very beautiful, while to another everything appeared greatly magnified.

This may be regarded as the first stage of the disease. It is usually of short duration. In the milder forms of the disease, the stupor is only momentary. The patient is at first, perhaps, aroused with difficulty, but he gradually regains his consciousness. If, however, the attack is severe the patient shortly passes into a state of coma. The skin is hot and pungent to the touch, and by actual experiment, according to the observations of Dr. Dowler, the temperature is elevated to 112° Fahr. The pupils are dilated and insensible to light; the breathing hurried and labored; the pulse is sometimes slow and full—sometimes frequent and feeble, though the action of the heart may continue inordinately strong up to the last moment of life.

In the third stage, the symptoms are those of collapse. The pulse becomes more frequent and feeble; the respiration, which at first was hurried and labored, now becomes stertorous, and accompanied with sighing and moaning; the skin cool, or the surface of the body may retain its natural temperature, though the head may be hot; the sphincters become relaxed; extremities cold; the countenance swollen and livid; the pupils may be dilated, but are often firmly contracted; tracheal râles appear; either the patient is quiet, as if completely paralyzed, or else convulsions, often violent in character, supervene, and he dies suddenly, or he may remain in this condition for several hours.

The first stage corresponds very nearly to that condition described by Southern writers as "solar exhaustion." Dr. Dowler makes a distinction between this "solar exhaustion" (the *coup de soleil* of northern latitudes) and what he calls "solar asphyxia." The former he regards as "a mere fainting, in which the face is pale, skin cool, or not above the natural standard, while, in the latter, the skin is burning hot, face flushed, and the mind and body are utterly insensible to impressions." It runs its course rapidly, and often proves fatal in 30 minutes. Dr. Cartwright says, the cases of "asphyxia are often incurable from falling into an incurable state before medical aid can be obtained!" while those of exhaustion simply, if properly treated, will yield as readily as a case of common intermittent, and almost as fatal as "solar asphyxia," if improperly treated.

The second and third stages, described in the progress of the disease, are so intimately connected that it may seem an unnecessary division; but it is more convenient to regard them separately. They differ usually in the mode of attack, and for this reason some have regarded them as a distinct condition. The stage of collapse is most frequently noticed in those who are seized late in the afternoon, "without the signs of apoplexy," after exposure to the heat and fatigue of the day. But the same condition may occur in those who have been seized suddenly "with the signs of apoplexy," and yet pathologically there may be no difference.

Of 60 cases which came under my observation during the past year, 44 were insensible at the time of admission, and 16 were either stupid or sensible. The pupils were dilated in 30, contracted in 19, and natural in 11. The temperature of the body was hot in 34, warm or natural in 14, and cool in 12; while that of the head was elevated in 31, warm in 11, and cool in 18.

The respiration was hurried in 44; the pulse was uniformly accelerated, varying from 100 to 160, and even more per minute. Convulsions were present in 24, delirium was noticed in only a few. 52 of the patients were males. The average duration of the fatal cases was about 4 hours.

The time of the attack in 3 cases was between	8	and 11 A. M.
" " " " " " " 40 " " "	11 A. M.	and 4 P. M.
" " " " " " " 17 " " "	4	and 9 P. M.

Convalescence is usually speedy, after the severity of the disease has passed, and reaction is fully established, varying from a few minutes to five or six hours; the patient sinks into a deep slumber, and awakes somewhat exhausted, and the cerebral functions disturbed; but this soon disappears. Two patients only complained of severe pain in the head, and at intervals exhibited great forgetfulness for nearly a week; and one was occasionally delirious.

A case was reported to me in which delirium supervened, resembling that of delirium tremens. I can conceive that such a condition may exist, but this patient was intemperate, and had been drinking to excess previous to the attack.

Dr. Pepper reports 20 cases, 10 of which died, and 3 resulted in insanity. This termination was not noticed in over 100 cases received at the New York Hospital. In the reports of lunatic asylums, however, few cases of insanity are referable to an attack of *coup de soleil*. One patient was delirious, and with the greatest difficulty restrained.

The statistical reports are too inaccurate to furnish any satisfactory data for the mortality of this disease, as no attempt has been made in the reports to distinguish it from "cerebral apoplexy;" but this latter class is, I believe, less frequently met with than was formerly supposed; and that their number will somewhat diminish as the facilities for *post mortem* examination are furnished, and that by far the greater number of cases included under the head of *coup de soleil* are nothing more than "nervous prostration." About one-half of the cases are usually fatal. The mortality of the past year will, however, be above this estimate.

The total number of cases admitted to this Hospital since 1845, is 150,

of which 78 died. The mortality of the cases admitted in 1853 is 33 in 67.

The mortality of hospital practice must be greater than that in private, as very many were admitted in a moribund condition, and died before any treatment could be adopted, while others were rendered hopeless by being brought a long distance, several hours after the attack.

The prognosis will depend on the stage of the disease. In the first stage, the prognosis is usually favorable; much, however, will depend upon the treatment adopted. The symptoms indicating collapse are always unfavorable.

In 33 fatal cases, the pupils were contracted in 20, moderately dilated in 7, and markedly so in 6; while, in the successful ones, the pupils were dilated in 19, and nearly natural in 15. No case recovered in which the pupils were contracted. Mere stertorous breathing is not necessarily fatal; but after the respiration becomes *sighing* and *moaning*, the prognosis is very unfavorable; only two patients recovered after this character of the breathing was present.

To these two symptoms—the condition of the pupil and the character of the respiration—I attach much value; and if other observations shall confirm this, they will furnish the most reliable basis for prognosis.

The respiration was sighing or moaning in 31 of the 33 fatal cases; convulsions were noticed in 24. This is a grave symptom, but 6 recovered after they were present. The pulse alone is no safe criterion of the actual condition of the patient for it may continue of fair strength throughout the whole course of the disease, with no perceptible alteration either in force or frequency, though the patient may be under the free use of stimulants. This will frequently surprise those who are unaccustomed to observe it.

A fatal relapse occurred in one instance. This patient was attacked suddenly while at his work, and lost all consciousness. As soon as he had sufficiently recovered, he walked a long distance to the Hospital, exposed to the direct influence of the sun. This exertion, combined with his previous prostrated condition, probably induced another attack. He again partially convalesced, but immediately sank into a comatose condition, from which he did not rally.

The pathology of this disease is uncertain. We have as yet failed to discover any satisfactory lesion to account for the phenomena noticed before death. It is now, however, generally admitted to be merely “exhaustion” produced by fatigue—either in the sun, or, less frequently, in a close and over-heated apartment.

The post mortem appearances, though of a negative character, are precisely opposite those found in “congestion” of the brain or apoplexy produced by insolation—in other words, *coup de soleil*. And it is of great importance that this relation should be correctly understood, for they obviously require an opposite course of treatment. Unfortunately these two conditions are too indiscriminately called *coup de soleil*. Our nomenclature, in this respect, is imperfect, and calculated to mislead those who are unaccustomed to observe it. But we must not infer, simply because a disease has been erroneously called *coup de soleil*, that we have

apoplexy to contend with. "It is debility we have to meet, and not repletion." Depletion, which is essential in the one, is almost necessarily fatal in the other.

In some cases we have apoplectic symptoms with those which properly belong to the opposite condition. And we may perhaps be puzzled to know to which class they belong. But even in these cases, we rarely find any lesion. Sometimes there will be found a moderate congestion of the brain, but no more so than we often find in cases where we suspect no lesion of that organ.

The following case may perhaps be interesting, as illustrating this:

An unknown woman was picked up in the street in a state of exhaustion, and brought to the Hospital at 8 p. m., Aug. 14th. Nothing could be learned of her previous history. She was completely insensible, pulse frequent (120) and feeble; respiration hurried and labored; skin burning hot; temperature of head elevated; pupils contracted and insensible. The prognosis was unfavorable. Our ordinary treatment was adopted. Sinapisms were applied to the calves of the legs and abdomen, ice to the head. Stimulating enema of spts. tereb., brandy, and tr. capsici were administered moderately. Frictions with mustard were also ordered. Four hours after her admission, her condition became decidedly worse. The slight convulsive movements of the body, which were noticed at the time of her admission, were more marked and violent, and it was only with the greatest difficulty that she could be confined to bed. The breathing was exceedingly labored, and accompanied with sighing and moaning—pupils dilated; the pulse very frequent, and scarcely perceptible at the wrist; the countenance swollen and livid; extremities cold; the stomach refused to retain the stimulants. The bronchial tubes became clogged with an increased secretion of mucoas; and deglutition was very difficult. The slightest attempt to swallow threatened almost immediate asphyxia. She was ordered injections of brandy and carb. ammonia.

On the following morning reaction, was fully established. The pulse 130, but fair strength. The head and surface of the body hot; eyes suffused, red and injected, fixed and motionless; pupils contracted to a point and inactive; face flushed; countenance swollen and turgid; respiration deep and stertorous; and the patient was completely comatosed,—the quantity of stimulants diminished, and an aloetic enema repeated: ice re-applied to the head, and sinapisms to extremities.

The physician in attendance now regarded these symptoms sufficiently indicative of cerebral congestion to warrant depletion. Ordered a moderate abstraction of blood from the temples by cupping, and the treatment adopted during his absence to be continued. She died 21 hours after admission.

Autopsy 18 hours after death. No marked congestion of the brain or lungs was observed. The heart was flaccid and filled with fluid blood.—The liver was much congested—other organs healthy.

This case was, doubtless, one of "nervous exhaustion"—a condition so often mistaken for, and associated with, "cerebral apoplexy," and it was the only one in which re-action ran sufficiently high to indicate depletion.

But even in this the post-mortem disappointed us. I have only seen

a few, a very few cases, of insolation verified by a post-mortem examination,—certainly not *one* during the past year, although examinations were made in *all the cases* in which we suspected any cerebral lesion.

The diagnosis of those cases, which simulate apoplexy is often difficult. The remarks of Dr. Condie, though inapplicable to the case just given, may perhaps be generally useful. He says : “ In those cases requiring depletion, the head particularly, and often the entire surface of the body, is hot. The eyes injected ; pupils contracted ; pulse small, quick, and corded. Tongue red and dry. Patients are delirious, restless, and in a constant state of agitation ; and if not speedily relieved by prompt and active treatment, coma ensues, and the patient dies as in acute meningitis.”

The true pathology of this disease, like those cases of death produced by lightning, will probably never be correctly explained, unless, perhaps, the microscope may aid in removing the veil of mystery which surrounds it. But it must be remarked *en passant*, that there are many points of resemblance in the appearance of those who have died from the effects of heat, and the cases reported of death from lightning.

Does the heat produce death by destroying the “vital principle,” as Hunter supposed was the effect of lightning? Does it produce some chemical change in the blood itself, so that it can no longer subserve the purposes of innervation? or does it produce its effect primarily upon the nervous system? This is the most plausible theory. The vital powers, already enfeebled by fatigue and the heat of the atmosphere, are unduly stimulated. The natural balance of the circulation is destroyed, and the heart contracts with a “morbid activity.” The lungs are engorged with blood, and the heart labors to overcome the increased obstacle, until at length it is exhausted by this “morbid activity,” and passive congestion takes place in the capillaries throughout the body.

The pathology of this disease is too obscure and uncertain, and observation too limited, to arrive at any satisfactory conclusions in regard to the *treatment*. It is at best empirical. We regard the disease as one of debility, and we partially treat it as such.

The great practical point to be regarded in the treatment is, that this affection is entirely distinct from *corp de soleil*, as generally understood by the term. It is a disease of “debility,” and not one of “repletion.” Depletion is generally contra-indicated, and stimulants are usually required.

In cases of *Insolation*, the lance is often employed. But these are very rare. During the summer of 1818, there were 13 cases admitted into the Hospital. These were largely bled ; 60 ounces were taken from the arm by repeated bleedings ; and in one case as many as 80 ounces. And the “recovery in this one was much more marked and speedy.” Three of these died, and the post mortem appearances were precisely those of “cerebral congestion.” But in cases of *exhaustion*, I have never seen a patient recover after he had been bled.

This practice is now nearly abandoned. Formerly, nearly every case treated before admission to the Hospital had been bled. But not a *single patient* had been bled of those admitted during the past summer. They do not bear well even the local abstraction of blood by cupping.

The plan of treatment usually adopted is to place the patient in a hot bath, rendered stimulating perhaps by mustard or capsicum—or counter-irritation to the whole body by means of mustard; a stimulating enema of tr. aloes c., or, what is preferable, spts. terebinth; ice to the head *when the temperature is elevated*; brandy and tr. capsici, or even carb. ammonia if required.

The indiscriminate use of *cold affusions* is productive of harm. Injurious and often fatal effects result from them. It is a popular and erroneous idea that a patient, as soon as he is attacked, should be completely deluged with cold water. To employ it in every case would be as absurd as in cases of collapse from any cause.

Another important consideration in the treatment of the earlier stages is *rest*. In crowded cities, to which this disease is mostly confined, this caution is too much disregarded. As soon as a patient is attacked, he should be placed in a horizontal position, in as cool a place as possible, and perfect rest required. Nothing can be more serious for a patient in this condition, to be carried, as is too often the case, upon an ordinary cart for a long distance, or allowed to remain exposed to the influence of the sun.

The length of this paper will prevent any detailed account of the cases themselves. They were admitted during the attendance of Drs. Joseph M. Smith and H. D. Bulkley, and the treatment adopted during their absence was approved of by them. In conclusion, I desire to express my special acknowledgments to my senior assistant, Dr. John B. Chapin, for his valuable assistance, not only on this, but other occasions.

New York Hospital, March 15, 1854.

From the Virginia Medical and Surgical Journal.

On the Treatment of Phthisis by Iodine Inhalations. By M. PIORRY.

M. Piorry read an interesting paper on this subject to the French Academy of Medicine, (Jan. 24th, 1854,) from which we take the following extracts:

The majority of remedies hitherto employed in phthisis have been almost or entirely useless. Various medicinal agents have been vaunted as efficacious in this disease, and then, after a few trials, experience has condemned them, and they have been abandoned and forgotten. Will the preparations of Iodine share the same fate? There is reason to hope that this will not be the case, and it is the design of this memoir to set forth the facts which authorize this hope.

I was induced to employ iodine and the vapors of iodine in the curative treatment of pulmonary phthisis by the following circumstances. It was known that iodide of potassium possessed a real and even prompt efficacy in chronic ostitis and periostitis, in scrofulous glandular enlargements, and in many other affections more or less allied with tuberculosis; M. Deyne, an interne of my service, and I, concluded that this remedy

would be useful in phthisis (pneumophymie.) The results of our experiments were very satisfactory. A striking amelioration took place in many of our patients, and this amelioration was real, for of the patients mentioned in my work on Practical Medicine, three or four are still living in the enjoyment of good health.

After the successful treatment of hydrocele and tuberculous disease of the testicle by iodine injections, it was natural to attempt to obtain similar results in pulmonary excavations. It would have been difficult, if not impossible, at all events it would have been extremely rash to have injected tincture of iodine into the air-passages. We therefore bethought ourselves of the vapor of iodine.

In hospital practice it was necessary to select the simplest method of inhaling iodine. One or two scruples of iodine was accordingly placed in a wide-mouthed jar of the capacity of a quart; the vapor of it was disengaged spontaneously with more or less rapidity, according to the degree of heat and moisture of the atmosphere.

When we used the tincture of iodine, we poured from one to three ounces in the jar, and heated it until the vapors of alcohol and iodine were liberated.

The patients breathed the air contained in these recipients, and charged with alcoholic and iodine vapor. One inspiration at a time is sufficient, but it should be deep, as when a sigh is heaved. Such an inspiration produces little irritation of the air-passages; it should be repeated one or two hundred times every day, at intervals, for several successive inspirations produce pain in the larynx and bronchi, and cough.

Even during sleep the patient should inhale iodine. For this purpose several saucers, each containing one scruple of iodine, should be placed about the pillow. At the hospital, we attach numerous phials of iodine to the iron frame which supports the bed curtains. The air thus becomes saturated with iodine; the starched curtains are colored blue, and the iron of the bedsteads assumes different tints under the action of the iodine.

If a moist starched paper is interposed between the jar containing iodine and the patient's mouth as he takes an inspiration, it turns blue; if the same air, after traversing the lungs, is breathed upon the paper, it causes no change. The inference from this fact which I have observed very frequently, is that the iodine which entered the lungs is absorbed there, during the brief sojourn of the air in the air vesicles.

The majority of the patients subjected to this treatment at *La Pitié*, *La Charité*, and in my private practice, took also from twenty to sixty grains of iodide of potassium daily. In all those cases in which the extent of the lesions rendered it probable that adhesions, or that remarkable supplementary circulation so well described by Natalis Guillot, existed between the pulmonary and costal surfaces, we had recourse to frictions with tincture of iodine diluted with 19 parts of water. The patients were placed, in some cases, under other modes of treatment: 1. Under the use of tartar emetic in small doses, the fifth of a grain, for example. This heroic remedy was employed chiefly in those cases in which mucous, puriform, or purulent liquids accumulated in the bronchi, and produced

a tendency to asphyxia or hypoxæmia. 2. Under the use of astringents, when the state of the intestinal canal required it; albumen, opiates, phosphate of lime, subnitrate of bismuth, etc., were employed with this object, but their use was discontinued as soon as the diarrhoea (enterozhæa) was suppressed. 3. Under the use of quinine; in large doses when the spleen was congested; in small doses when there was simply a nightly exacerbation of fever depending upon the entrance of pus or softened tuberculous matter into the circulation. 4. Upon a nutritious and reparative diet; a very important point, for surely, if I was called upon to choose between hygienic precautions and the whole category of remedies besides iodine, I should give the preference to a good regimen. 5. Belladonna, opium, and other narcotics were employed, though rarely to moderate the cough.

The cases which I have treated have not required the use of setons, issues, permanent blisters, or moxas, and I have not been able to comprehend the utility of these artificial pyogenic lesions in a disease in which the formation of pus is a disastrous accident.

Almost all of the patients remained in Paris. They were not sent to Nice or Pisa, or other parts of Italy, a country where phthisical patients, coming from the north, in spite of all that has been said, recover no faster and no better than elsewhere.

Thirty-one patients have been subjected to the treatment thus described during the past two years. They all presented, in different degrees, the symptoms commonly attributed to pulmonary phthisis, that is, cough with puriform expectoration, hectic fever, emaciation; the majority of them suffered from diarrhoea, connected probably with tuberculous ulcerations; in many, the larynx appeared to be involved in phymic disease; the majority had spit blood, (pneumoerhæmia.)

All of these subjects presented marked dullness at the summit of the lungs, either under the clavicle or at the superior scapular region. In most cases there was a hardness at these points, perceptible to the finger. Ordinarily it was possible to define the diseased structure accurately, and to distinguish the parts in which there was great condensation from those which had undergone less alterations of structure. In some cases a *bruit hydraérique* could be heard.*

In every case the stethoscopic signs were as positive as those revealed by plessimetry. At the points at which dullness and resistance had been noted, the ear recognized rude or tubal respiration, and more or less resonance of voice. In many cases large cavities were indicated by loud gurgling, cavernous respiration, and pectoriloquy. Each patient expectorated round, opaque, phyoid sputa, the amount of which corresponded to the extent of the disease as determined by other methods of exploration.

I desired to appreciate the effects of iodine with precision, and therefore I did not trust to the indications of plessimetry. I ordered charts, on which were described exact delineations of the diseased parts, and representations of the variations in sound upon percussion which occurred from day to day. In casting the eye over these figures, it will be seen

* The sound obtained by percussing over a cavity containing air and liquid. Percussion over the cœcum during typhoid fever often gives excellent examples of it.—TRANS.

that after four, six or twenty days, six weeks, or three or four months of the iodine treatment, there was in almost every case a diminution in the extent of the surface over which there was at first feebleness of respiration, dullness, resistance, etc.; that, at the same time, the stethoscopic signs indicated an amelioration in the condition of the condensed portions of lung. This result did not occur only in those patients who were slightly diseased, but in almost every case. Numerous patients with cavities in the lungs were apparently cured. The ultimate results were as follows: Decided amelioration in the symptoms and anatomical characters in 20 patients. Disappearance of the anatomical characters and of most of the symptoms in 7 cases. Death, with or without amelioration, in 4 cases.

After some reflections upon the possible mechanism by which iodine operated in the cure of phthisis, M. Piorry concluded with the following propositions:

1. The inhalation of the vapor and tincture of iodine are useful in the cure of phthisis, [pneumophymie]

2. In many cases such inhalation is followed by a diminution in the extent of the indurated parts surrounding tuberculous deposits, and an amelioration in the general symptoms;

3. It is probable that tubercle itself disappears under the influence of iodine inhalations;

4. That inhalations of the tincture of iodine may promote the cure of tuberculous cavities;

5. That after the softening of tubercles, the resulting cavities may cicatrize spontaneously;

6. That compression of the thorax over the points of disease indicated by percussion and auscultation, may contribute to the cure of the local lesion, and to the prevention of pyæmia;

7. That iodide of potassium administered internally, and frictions with diluted tincture of iodine over adherent portions of the lung, are also of great utility. If, added M. Piorry, any useful therapeutical facts have been brought out in the preceding essay, I would observe that science and humanity are indebted for them to the progress of accurate diagnosis.

After this memoir was read, Dr. Londe observed that vapors of iodine was not the only remedy which could be inhaled with advantage in phthisis; he had employed arseniate of soda inhalations with great success. M. Caventu remarked that this salt was not volatilizable, and that if it had been used in fumigations, that arsenious acid vapors alone had been inhaled. M. Chatin observed that some physicians considered goitre and phthisis antagonistic, and that iodine was the real remedy for goitre. M. Bricheau complained that M. Piorry had not alluded to his successful treatment of phthisis by tartar emetic.

M. Moreau regretted that Professor Piorry deemed it necessary to veil his ideas in language differing from ordinary scientific nomenclature: the terms *phymie*, *pneumophymie* and *phymopneumonie*, which M. Piorry employed instead of the terms, *tubercle*, *phthisis*, *tuberculous pneumonia*, etc., produced a deplorable confusion in the mind of the hearer. There was no reason, Prof. Moreau said, to encumber language with neologisms when there were already names for everything.

M. Piorry replied, with huge dignity, that an author who had pub-

lished a work in eight volumes which had become a classic, had a right to use the nomenclature employed in that work. M. Moreau was not ignorant that Hippocrates employed the word *phymie*; it would be very unfortunate if in such an assembly, one could not be understood when employing words derived from the Greek.

From the New Jersey Medical Reporter.

The Speculum and its Modifications,—its importance in the treatment of Diseases of Females with some cases illustrative. A Lecture delivered at the N. Y. Preparatory School of Medicine, by AUGUSTUS K. GARDNER, M.D., Instructor in Obstetrics and Diseases of Females—one of the Committee on Obstetrics, &c., N. Y. Academy of Medicine, &c., &c.

[Continued from page 42.]

In prolapsus uteri, the speculum is of service—first, in diagnosing whether this descent is due to a hypertrophied os which by its weight may have dragged down the uterus: if so, then it is useful in subsequent treatment. If it is owing to relaxation of the vaginal tissues, then by pinching up the vagina as it falls in folds through the blades of the instrument with a “serré fine,” as in cases reported by Marjolin, a cure may be effected by the adhesive inflammation caused thereby, and the consequent contraction of the capacity of the vagina.

In syphilitic ulcers upon the os, or in the vagina, the use of the speculum will be admitted, without controversy at the present day.

In cases of polypi, diagnosed by the finger, the speculum will frequently be of service, although not absolutely necessary, to assist in their removal.

In cases of obstinate and continued leucorrhoea, dysmenorrhœa, menorrhagia, and repeated abortion, the importance and value of this instrument cannot well be exaggerated.

Bennet on the Uterus—the most available and reliable book upon this subject, is in the hands of every one, and has been of inestimable value in the diagnosis and prophylaxis of these diseases. It has gone over the whole ground so thoroughly, that I shall not now do more than relate in this place, a few, from very many corroborative cases from my own personal experience.

Mrs. S——, a lady residing in New Jersey, consulted me in April 1853. She was of delicate frame, about 24 years of age, and of a remarkably healthy family. Her youth was one of health, till at the close of her seventeenth year she began to be affected slightly with dysmenorrhœa. This continued with more or less severity for several years, till in her 23 year she was married. She had one child, but for several subsequent years she was much troubled with dysmenorrhœa. An aggravated dyspepsia however, prostrated her strength and very much destroyed the pleasures of life.

When I was called, it was with the purpose of engaging me to attend her in an approaching confinement which she said would take place in the course of two months. She attributed her increased indigestion to

this cause, which had recently become so aggravated as to compel her to live solely upon stale bread of three days age, salt cod-fish, and cold water. This had been her diet for the three weeks antecedent to my visit. She was astonished that she did not grow any faster, for she could wear all her dresses as usual: moreover her menses appeared regularly every month, accompanied by great pain and hysteria. The total amount of the discharge would not spot a cloth to the size of the palm of the hand. I suggested the idea that she was not pregnant, but it was instantly negatived by the positive statement that she had felt life, and that her husband and mother had both seen the movements in the abdomen. I said that by laying a cold hand upon the abdomen, these movements might easily be excited, and she laid down that I might feel the foetal movement. The uterus was not even discernible, far less any impulse from its supposed contents. It required much argument and positive statement, to convince them that she was not with child, but that she was laboring under some uterine affection and sympathetic irritation. A speculum examination revealed a hypertrophied and raspberry colored os, denuded of its epithelium, but *without* the least leucorrhœal discharge, or any of the ordinary symptoms of that description. Five or six pencillings with the solid nitrates argenti entirely removed this condition—the appetite, strength and vigor were restored; the dysmenorrhœa entirely abated, so that, as she expressed herself, she “had never had them so unnoticeably since she was seventeen.” In the September following she actually did become pregnant, and till the present time has had no bad symptoms.

Mrs. W—— came to my class at the Northern Dispensary, some year or so after her first confinement at the full time. She complained of great debility and lassitude, weakness in the back, accompanied by a dragging sensation in the loins, a very profuse leucorrhœa, and great pain in urinating. On examination, the os uteri was so much hypertrophied that it was too large to enter into the opening of the four-bladed speculum, extended to its utmost limits. The os was divided into three lobes, the largest posterior—evidently lacerations occurring during her recent childbirth—all denuded of epithelium, granulated, and bathed in a profuse muco-purulent discharge. The cavity of the os was visible for half an inch or more, and from it issued the limpid, tenacious albumen secreted from the glands of the cavity. In the course of a few weeks she was very much relieved by the ordinary local and tonic treatment, and she did not return again, although entirely well.

Mrs. M——, a stout, plethoric woman, with every sign of health, had, during the year 1853, no less than three abortions at about the third month, without any known cause. She had no pain in the back, no leucorrhœa. Knowing no cause, I said that I was certain she had a local trouble. Examination showed a congested cervix, the cavity somewhat fissured, undoubtedly the cause of the abortions. The rationale is as follows: The gestation went on till the growth of the foetus and the consequent enlargement of the womb, gradually shortened the neck until it encroached upon the fissured portion. As this was done, slight hemorrhage commenced, which gradually increased until the life of the ovum was destroyed, and it was then thrown off.

Mrs. W—— in stepping from her carriage, had a slight jar. She was daily expecting confinement. She went into the house feeling a slight,

uncomfortable sensation in the small of the back. That night she was taken in labor, and the next morning was delivered of a large dead child, strangled by the cord around its neck being tightly drawn by the trip in stepping upon the side-walk. She got up with no bad symptom, and continued perfectly well. Some year or so after she had an abortion at the third month, without any known cause, and but a year subsequently, when pregnant about the same time, she noticed a very slight discharge of bloody mucus—six months after, this was repeated—means were used to arrest it, and a speculum examination was proposed, and assented to for the next day, with the intention of cauterizing the ulcerations or fissures which were diagnosticated to be present, and the cause of all the difficulty. By day-light a most alarming hemorrhage commenced, followed by abortion seriously threatening the lady's life. A subsequent speculum examination showed fissures, a hardened and granular os, and an extremely vascular and congested condition of the whole vagina. In appearance, this lady was remarkable for her healthful beauty, and was never troubled by leucorrhœa or any unpleasant symptom indicating this serious difficulty.

Mrs. P—— a burly Irishwoman, nearly six feet in height, over sixty years of age, whose menses had ceased for many years, complained of great weakness in the back, bearing down, accompanied by leucorrhœa, though not excessive. On inspection, an ulceration of the size of a shilling was discovered, encircling the os. By two cauterizations the ulcer was healed, and the unpleasant symptoms which had defied all treatment for many years, were removed.

To these few cases, scores similar could easily be added. What do we deduce from them? *First*, that flour-albus is but a symptom of a local disease. *Secondly*, that this same disease may be present with many serious affections, but still unaccompanied by any vaginal discharge. *Thirdly*, that it may stimulate pregnancy. *Fourthly*, dysuria is caused by it. *Fifthly*, it is the prime cause by nervous agencies, of dyspepsia.

At some future time, I will in more detail, give you further particulars respecting the protein symptoms of disease, all depending upon disease of the os uteri, and all curable by means of the speculum.

153 Wooster street, N. Y., February, 1854.

From the American Journal of the Medical Science

Anatomy and Physiology.

1. *Structure of the Spleen.*—In the sixth number of the *Quarterly Journal of Microscopic Sciences*, Mr. Huxley gives an account of his recent investigation into the structure of the splenic Malpighian bodies. From these it results, that one or more minute arterial twigs enter and frequently subdivide in the substance of the Malpighian body, making their exit on the opposite side, to terminate finally by breaking up into minute branches in the pulp. The artery is not only surrounded by, and in immediate contact with, the indifferent tissue of the pulp, but the latter is really the representative of a part of its tunica adventitia. The vessels within the Malpighian bodies are, however, not arterial ramifications

only, as there is, in addition, a tolerably rich network of capillaries connecting the arterial ranuncules.

Mr. Huxley has not been able to convince himself of the existence of any fluid matter at all in the interior of perfectly fresh Malpighian bodies of any animal he has examined. These bodies appear to him solid, though soft; and to have an essential structure the same as that of every "indifferent tissue" he has examined, and not composed of cells, although here and there true cells are to be discerned.

In the human spleen, the Malpighian bodies cannot be said to possess walls; the tissue at the line of junction with the pulp not forming a distinct membrane; and Mr. Huxley cannot see the membrane and other limitary structures which Mr. Sanders has so circumstantially described. On this discrepancy we may remark, in the words of a learned judge, that "those who see it, cannot see it unless it be there; and those who do not see it cannot see it at all."

It may be said, then, that the Malpighian bodies of the mammalian spleen are not closed follicles, and have no analogy whatever to the acini of ordinary glands, but that they are portions of the spleen, everywhere continuous with the rest, but distinguished from it by immediately surrounding the arteries, and replacing their tunica adventitia, by containing no wide venous sinuses, and by being composed of absolutely indifferent tissue.

Mr. Huxley considers also, with Leydig, that no line of demarkation can be drawn between the spleen, the lymphatic glands, Peyer's patches, the glandulæ solitariae of the intestine, the suprarenal capsules, and the thymus gland, of which "vascular glands" the primary form is represented by the intestinal solitary gland, which is nothing but a local hypertrophy of the indifferent element of the connective tissue of the part, and possesses no other capsule than that which necessarily results from its being surrounded by the latter. To these the follicles at the base of the tongue and in the tonsils must be added; and Mr. Huxley thinks that from these there is but one step to the liver.

2. *Vascular Tissue of the Schneiderian Mucous Membrane.*—Dr. Kohlrausch published in Müller's *Archiv*. (1853, H. 2.) a description, with figure, of what he designated as an erectile tissue, lying between the mucous membrane and the periosteum of the turbinated bones, especially at their posterior aspect. It is a venous plexus, which can be exhibited by insufflation or by injection, consisting of loops of venous twigs, running vertically to the bone, and closely connected by firm areolar tissue. The mucous follicles, which, in other parts of the nasal mucous membrane, are quite superficial, and have short funnel-shaped openings, lie here more deeply between the meshes of the venous network, and discharge their secretion through longer ducts.

This peculiar arrangement of the vessels of the Schneiderian membrane accounts for the profuse hemorrhage which so often occurs from the nose, as well as for the sense of fulness and tension within that organ, and the copious sero-mucous discharge from it, which are well known as ordinary symptoms of coryza.—*Assoc. Med. Jour.* March 24th, 1854.

3. *Mucous Membrane of the Stomach.*—The *Zeitschrift für Ration-*

elle Medizin contains a paper by Ecker on the glandular apparatus of the gastric mucous membrane, which he examined shortly after death in the bodies of several young men who had committed suicide. The account he gives is as follows:

In the middle part of the stomach, there are only simple cylindrical glands, each from half to three-quarters of a line in length, and about one-fiftieth of a line in diameter. They lie vertically, and are somewhat club-shaped at the closed extremity, just, in fact, as Sharpey and others have described them. The mucous membrane of the cardiac end of the stomach is composed of similiar follicles; only many of them are bifurcated at the end. In the pyloric portion, we find, besides these, granular-looking bodies, which are glands somewhat resembling those of Brünner in the duodenum, and the ducts of which branch and end in grape-like vesicles. The function of these glands is, no doubt, to furnish mucus for the lubrication of the pylorus, where the bolus of food is necessarily most consistent. Besides all these, we meet with "lenticular glands," resembling the solitary follicles of the intestine, which have a diameter of from a quarter to three-quarters of a line, and are least abundant along the great curvature of the stomach.—*Assoc. Med. Jour.* March 24th, 1854.

4. *The Anatomy and Surgical Relations of the Fascia of Scarpa.*—Mr. J. Struthers states (*Month. Jour. Med. Science*, May, 1854), that the fascia of Scarpa is not commonly understood fully, in the simplicity of its anatomy and the importance of its surgical bearings. In the common mode of conducting the dissection of the groin, he maintains that the true origin of the fascia is divided, and its nature and connections cannot be seen or understood. He gives the following directions for demonstrating this fascia: "Having reflected the skin of the groin for some inches both above and below Poupart's ligament, divide the superficial fascia of the thigh two or three inches below Poupart's ligament, and, using the point and handle of the scalpel, turn it up, off the surface of the glands and superficial vessels, to about an inch above Poupart's ligament. Next, by an incision curving down from the anterior-superior spinous process of the ilium to near the symphysis pubis, divide the fascia through its whole depth, down to the tendon of the external oblique; and now dissect the whole fascia down, close off the external oblique. The lax cellular tissue here, yields almost to the handle of the scalpel, but at, or immediately below Poupart's ligament, the handle of the scalpel, is suddenly and firmly arrested. The dissection is now done. Now take the femoral end of the dissected superficial fascia in one hand, and the abdominal end in the other hand, lifting them up a little, and stretching them up and down, and, on looking in below, a thin semi-transparent fibrous membrane is seen, passing between the superficial fascia and the fascia lata. This is the fascia of Scarpa, fully displayed; but if the glands and surrounding cellular tissue be now carefully picked away from its lower or femoral aspect, the fascia will be more clearly seen."

Mr. Struthers gives the following description of this fascia:

"The *fascia of Scarpa* arises from the fascia lata close below Poupart's ligament, passes upwards for an inch, and blends with the common superficial fascia. It is separated from the lower part of the tendon of the

external oblique, behind, by very loose cellular tissue, and before, from the common superficial fascia by the superficial glands and vessels; and is continued inwards around the cord, becoming continuous with the fascia of Colles, or true superficial fascia of the perineum. It is a thin aponeurotic or fibrous membrane, forming a barrier or septum across the groin, by passing between the fascia lata and the common superficial fascia. When the urine, infiltrated in the perineum, has been directed upwards along the cord by the fascia of Colles, the fascia of Scarpa prevents it from passing down the front of the thigh. In relation to hernia, it assists in directing an inguinal hernia into the scrotum, and forms one of its coverings; it is covered by a femoral hernia, and tends to prevent the femoral hernia from passing upwards on the abdomen, by means of its union with the common superficial fascia."

5. *The Process of Repair in Teeth.*—The recent number of *Guy's Hospital Reports*, contains a very interesting communication by Dr. S. J. A. Salter, on the laws which regulate the formation of the "Dentine of Repair," one of the forms of what has been called secondary dentition, or that after formation by which the pulp cavity of the tooth is diminished or obliterated, after the tooth has attained a mature and adult condition.

There are three forms of secondary dentine: *Osteodentine*, in which the new tissue is arranged in systems resembling the Haversian systems of bones around isolated blood vessels; the dentinal tubes radiating from each centre. It always occurs in states of irritation or inflammation of the pulp. *Dentine excrescences* are little nodules of secondary dentine, occasionally found attached to the interior of the pulp cavity or otherwise healthy teeth. *Dentine of repair* is the special subject of the paper. This deposit is thrown out within the pulp cavity, *opposite* to that part of the external surface of the tooth where a fracture or wearing of the original dentine has taken place, thus thickening the body of the tooth opposite the injured part, so that the teeth which are worn down even level with the gum still present no cavity.

This process corresponds with the most beautiful exactness to the external lesion; as long as the enamel only is injured, no dentine of repair is deposited; but as soon as any of the dentine tubes are broken off or worn away on the surface of the tooth, so soon is there thrown out at their opposite extremities towards the pulp a deposit, limited with the utmost exactness to the injured tubes; not mathematically opposite, therefore, to the injured part, but *physiologically* opposite, according to the wavy course of the tubes. The dentine of repair is clear and translucent, and the part of the original dentine involved in the process becomes also more transparent than usual, in consequence of its tubules being filled up with solid matter.

6. *Elasticity of Arteries considered as a Cause of Animal Heat.*—Dr. Winn read before the Physiological Section of the Medical Society of London (May 8, 1854), a paper on this subject. The author stated that fourteen years since he had published, in the *Philosophical Magazine*, some observations which tended to prove that the elasticity of the arteries formed an important element in the generation of animal heat.—

About seventeen years since, while making some experiments with caoutchouc, he was forcibly struck with the property it possesses of evolving heat when suddenly elongated, and was led at the time to infer the probability of other bodies being similarly endowed. The elastic coat of arteries, especially, appeared to be one of the substances likely to exhibit this calefactory principle; and, in the event of this being the case, he thought it would not be unreasonable to conclude, that the incessant contractions, and dilatations of the arteries during life must form an efficient source of animal heat. Three years subsequently he was induced to resume the subject, and, upon making an experiment with part of the aorta of a bullock, he was much gratified in being able to verify his previous conjecture. The experiment was performed as follows: Having cut off a circular portion of the descending arch of the aorta, about an inch in length, he laid it open and carefully removed its external and internal coverings. He then pulled it to and fro with a continuous jerking motion, in imitation of the systole and diastole of the artery, for the space of about a minute. Immediately on discontinuing this movement, he placed it upon the bulb of a thermometer, and had the satisfaction of noticing, after the lapse of two minutes, that the mercury had risen as many degrees. On removing the thermometer, the heat diminished rapidly. To be certain that the increment of heat was not derived from any source other than that in question, he took the precaution of covering his fingers with a double layer of flannel, to prevent the communication of heat from the body. He also covered his mouth with a handkerchief, to guard against the warm breath affecting the thermometer while watching the progress of the experiment. It may also be right to state that the experiment was performed in a room without a fire, the temperature of the air being 55 deg. There were several difficulties to contend with during the investigation. The chief impediment appeared to be the moisture of the artery, which, by its evaporation, had a tendency to carry off a portion of the heat. However, by carefully drying the artery with a cloth, he succeeded in obviating this difficulty to a considerable extent, and was enabled to perform the experiment twice consecutively in a satisfactory manner. He had also, within the last fortnight, repeated the experiment in the presence of a medical friend with an equally satisfactory result. His attention was often arrested, while conducting the experiments, by other mechanical analogies between caoutchouc and the elastic coat of arteries. Like the former, the latter could be elongated to twice its ordinary length, and, on suddenly stopping the tension, would return to its usual dimensions with considerable force and a snapping noise. Physiologists, after having clearly proved that a great portion of animal heat is the result of chemical changes in the blood, yet confessed that a residuum of heat is not to be referred to this source. This residuum, he considered, arises from the mechanical action of the arteries. It would be exceedingly difficult to determine the precise quantity of heat given off during each beat of the artery; but if we admit the developement of only a very small quantity, it necessarily follows, from the circumstance of the action of the arteries being in incessant operation during life, that the heat must quickly accumulate to a great extent; and it is even probable that the body, unless cooled by the functions of the skin and lungs, would, in a short space, of time, become preternaturally hot. The following physio-

logical and pathological facts appear to corroborate the views he had taken as to the mechanical source of heat: 1. The minute distribution of the arteries to every part of the system insures a general and equal distribution of heat. 2. The rigidity of the arteries in old age is a probable cause of the diminution of animal heat at the close of life. 3. The increased warmth of the body after exercise seems to be readily explicable upon the principle of increased force of the arteries. 4. In many diseases of the lungs, where their functions are at fault, and at a time when the arteries are beating with great strength and velocity, the heat of the body is found to be above the usual standard. 5. Medicines which diminish the action of the heart and arteries almost invariably reduce the temperature of the body. 6. The heat of local inflammation, in cases where the constitution does not sympathize to any extent, cannot be satisfactorily referred to any other source, as the arteries immediately in the neighborhood of the affected part are throbbing violently, when the capillaries (which are supposed to play so large a share in the chemical theory) are generally considered to have their action impeded. Dr. Crisp has hinted that many cold-blooded animals are remarkable for the great elasticity of their arteries. This fact could not affect his theory. The languor of the circulation in this class of animals more than counterbalances any calefactory effect which might otherwise be produced by the resiliency of their arterial structure.—*Medical Times and Gazette*, May 27, 1854.

7. *Starch in the Brain*.—In our previous number, p. 466, we gave an account of the discovery by Purkinje and Virchow of starch globules in the human nervous centres. Mr. Busk states (*Microscopic Journal* number 6) that he has satisfied himself of the structural and chemical identity of these bodies with starch. He found these “corpora amylacea” in vast numbers in and on many parts of the brain (as on the septum lucidum, for example), in a patient who had died of cholera; and the cerebral substance in immediate contiguity with them appeared quite natural.

In the corpora striati he could find few or no starch grains, but an appearance presented itself which seemed to him to be connected with their formation. Many particles of sabulous matter were met with, which were lodged in irregular masses of what appeared a fibrinous or immature connective tissue substance; and, upon the addition of iodine, each mass of crystals was found to be immediately surrounded by an irregular thickness of a transparent matter, which was turned, not *blue* but a light *purplish pink* by that reagent—a substance, in fact, closely resembling in that respect the very early condition of the cellulose wall.

8. *On the Relation that Fat bears to the Presence of Sugar in the Livers of the Mammalia and Birds*.—Dr. Gibb, in a paper read before the Physiological Section of the Medical Society of London (April, 10, 1854,) drew the attention of the Society to the bearing which the amount of fat in the livers of man and animals, and birds possesses in relation to the presence of sugar in that organ, which may hereafter lead to some important deductions with reference to its pathology in connection with saccharine assimilation. From a series of experiments

which he had performed upon the livers of birds and some of the mammalia, from 1849 to 1852, with the original object of estimating the quantity of sugar present, he found that those which possessed much fat invariably contained a larger quantity of sugar than those, again, which appeared to possess very little, if any, of that substance. Thus, among the mammalia, in dogs and sheep, whose livers possessed nothing unusual in their ordinary characters, the presence of sugar was demonstrated, but in quantity exceedingly small, as compared with that found in the seals, whose livers again were absolutely gorged with fat, and contained a very large quantity of sugar. Among birds, the livers of the palmipedes, or web-footed tribes, and the grallæ or waders, which in most of the species, contained quantities of fat, were found to possess a much larger quantity of sugar than the livers of the gallinæ, or poultry, which were remarkable again for the absence of fat, as compared with the former.—To apply this discovery to man, he instituted a comparison in regard to the quantity of sugar between healthy livers and the state termed “fatty liver,” common in phthisis pulmonalis and experiments clearly proved that the amount of sugar found in the fatty liver very much exceeded that of the normal healthy liver. These experiments were repeated with the same results on numerous occasions, with the examination also of other organs besides the liver, but which would not now be noticed. The importance which the knowledge of this fact is likely to bear, in connection with the secretion of fat and sugar by the liver, their relations to one another, and their connection with the function of respiration, cannot be over estimated. Bernard has clearly demonstrated the presence of sugar in the hepatic veins going from the liver to the inferior vena cava, and right side of the heart; in other words, in the blood going to the lungs, but none in that returning from those organs, unmistakably showing that the saccharine element must undergo some chemical change in the lungs, as has been inferred by Magendie. He was not prepared to say what influence the presence or absence of fat may possess in relation to the secretion of sugar in the liver, but it is a fact of sufficient importance to engage the attention of physiologists in connection with saccharine assimilation. The fact, too, of more sugar being found in the “fatty liver” of phthisis than in the healthy liver, may possibly be the result of the interference of the ordinary combustion of the lungs, owing to the arrest of function in portions of those organs arising from the tubercular deposition. He would only just hint, at present, at a possible relationship between secondary mal-assimilation of saccharine matters and tubercle, but some further experiments are necessary before pronouncing an opinion.

Dr. Gibb has not examined the liver of diabetic patients in relation to the quantity of sugar contained in that organ.

9. *On the Deposit of Fat in certain conditions of the Bodies of the Lower Animals.*—Dr. Crisp directed the attention of the members of the Physiological Society (March 13, 1854,) to the above fact, which, as far as he knew, had hitherto escaped observation. A short time since, a Chilian eagle, which had been seventeen years in the Regent's Park Zoological Gardens, died suddenly from rupture of a blood-vessel in the lung. The bird was in beautiful plumage, in good condition, and weighed 6½ lbs. Dr. Crisp found the lungs so tuberculated that scarcely a sound

portion could be seen; notwithstanding this extensive pulmonary lesion, the bird was excessively fat; the flakes of fat in the pelvis and abdomen being large and solid. Dr. Crisp had met with many instances of a similar kind, more especially in birds; but they were not confined to this class of animals, for he had seen many examples of fat pigs with tuberculated lungs, and he had learned from some feeders of cattle that an ox with a damaged lung would often make fat sooner than a sound animal.—Perfect rest, however, was necessary; and it should be borne in mind, that if the thoracic lungs of a bird were diseased, other parts of the body would take on a compensatory action. Dr. Crisp thought that the explanation of the phenomenon, in these cases, was, that the carbon not being eliminated by the lungs was converted into fat by its union with hydrogen and oxygen. In making a comparison between pulmonary tubercle in man and the lower animals, it is important to remember that the latter are not affected with the exhausting purulent discharges which generally occur in the human species.

Dr. Routh could understand the theory of the beneficial action of cod-liver oil in cases of phthisis, but was of opinion that Liebig's theory, as to the generation of fat in that disease, was not established. The respiratory efforts are increased to forty per minute in phthisis; and the amount of carbon and hydrogen eliminated is so great that a deposit of fat seemed to be impossible. The like remarks would also apply to birds, since their respirations are exceedingly frequent.—*Med. Times and Gaz.* April 1st 1854.

10. BERNARD, *on the Conditions under which Certain Substances, usually retained in the Blood, pass into the Urine.*—During active digestion, the blood of an animal contains a certain amount of sugar, which does not pass into the urine; but if the mass of blood be diminished by bleeding, the urine soon becomes saccharine. If we inject a limited quantity of saccharine matter into the blood of an animal ($\frac{1}{2}$ gramme for a rabbit fasting, of the weight of 2 kilogrammes) the urine will contain no trace of sugar; but if the animal be bled before being subjected to this experiment, a certain quantity of sugar will pass into the urine.

M. Bernard explains these phenomena by considering that the loss of blood renders the animal of less volume, reducing it to the condition of one of smaller size. It is known that small animals may be poisoned by doses easily borne by larger animals of the same species; and animals after being bled, cannot withstand the same dose of a poison which they supported previously. These facts were formerly attributed to the increased absorption caused by the withdrawal of blood; but in the experiments above related, absorption had no part, as the substances were introduced directly into the circulation.—*Month. Journ. Med. Sci.* from *Soc. de Biologie*, 1853.

11. *Case of Diarrhœa Adiposa, confirmative of Bernard's Views with Regard to the Functions of the Pancreas.* By Mr. MARSTON.—This case was that of a man, a laborer, aged 35, who had frequent purging of a very peculiar fatty looking substance. No tenderness, swelling, or tumor could be detected, except a slight enlargement of the liver.

“His appetite was good, and he had a great desire for saccharine mat-

ters, fat meat, and hydro-carbons generally. Urine was passed in abnormal quantity, pale in color, with very slight re-action on litmus; sp. gr. 1,030. Under the microscope it presented a few epithelial scales, and a number of oil globules; on evaporating a portion, and treating it with ether, these globules were dissolved; there was less than a normal amount of urea and lithic acid, and no albumen; but Trommer's test, yeast, and oxide of silver, indicated the presence of sugar, and the skin was harsh and dry, though he did not complain at all of these diabetic symptoms, *all* of which disappeared some time before death. Tongue was slightly furred; gums, and inside of lips, were pale and flabby. Pulse 100, but it varied during treatment, from 90 to 120. No cancer, phthisis, or cardiac affection could be traced in any of his family, which had been generally healthy. The matters passed from the bowels presented a very fatty, tenacious, and peculiarly slimy appearance, deficient in bile, and altogether different from feces. On raising a portion on the point of a knife, it appeared in greasy masses. Under the microscope, numerous epithelial scales, with mucus, and a substance laden with oil-globules, in every respect similar to fat, were observed. Their fatty nature was rendered more evident by their being soluble in ether, and with liq. potassæ forming a semi-opaque gelatinous mass exactly resembling soft soap."

The treatment consisted in abstinence from "farinaceous and saccharine articles of food. Diaphoretics succeeded, though with difficulty, in producing diaphoresis; the sweat had no acid reaction on litmus. Olive oil, instead of being beneficial, only increased the discharge of fatty matter and deranged the stomach. Purgatives, mercurials, and counter-irritants, with small doses of iodide of potassium and ung. iodin. to region of liver, and a variety of other remedies failing to produce relief, at last, all medical treatment was discontinued. His appetite continued good, but the adipose diarrhoea (four or five stools per diem upon the average) continuing, he gradually sank, and died apparently from asthenia, after having been under medical treatment altogether thirteen to fourteen months."

On dissection, the duodenum was "quite healthy, but the head of pancreas appeared to be converted into a hard, schirrhoid tumour, which did not press upon the ductus communis choledochus, as in most of the similar recorded cases, whilst the body and other parts of glands were atrophied, and its duct was found perfectly obliterated, and degenerated into an impervious cord."

Mr. Marston concludes some excellent observations on this case with the following remarks: "Mialhe, adopting Bernard's views, explains the action of the pancreatic juice upon the fats by the principle of fermentation. More recently, another set of physiologists, of whom Frierichs and Lenz appear to be the most prominent, have published a series of experiments to prove that its absence in the intestine does not prevent the digestion and assimilation of fat. They experimented upon cats, and found the usual amount of fatty matter in the chyle, after ligature of the pancreatic duct. Here, then, exists a division between two leading sects of physiologists; for Bernard still adheres to his views. The question comes, does this case in any way fill up the gap? It has been advanced by Bouchardat and Sandras, that the free alkali of the juice, or serum of the blood, would be sufficient to dissolve the fat; and, adopting Plattner's

theory, the soda of the bile may be almost vicarious of the action of the pancreatic juice, in separating the fatty ingesta by saponification with its acid. But whether this could continue long is not evident, and what appears to be the real root of the question is, whether, under long continuance, this would not be incompatible with existence. In the case before us, it is possible that the choleate of soda of the bile, and the alkalies of the serum, did supply an alkali to the fat, thus saponifying it, and that the choleic acid, if Plattner's views be correct, taking albumen as its base, the resulting compound which is the product of so highly an organized gland as the liver, on the one hand, and the chemical and antiseptic action of the gastric secretion, which is doubtless itself not a mere chemical combination, but a definite semi-organized material, on the other, might give rise to the fatty albuminous molecular base of the chyle; but that, this continuing, these alkalies were not only insufficient in quantity to the digestion of the fatty ingesta, but an imperfectly organized material was formed, from which an imperfect chyle resulted.

"The presence of sugar in the urine in this case is difficult of explanation; but be it remarked that this was a transitory symptom, existing most when the patient partook largely of amylaceous matters which are easily capable of being resolved into sugar and ultimately ceasing altogether long prior to death. It might be that a larger than normal amount of fatty matter was presented to and absorbed by the tributary branches of the vena porta, and that, through the intermediate action of the liver (if Bernard's views be correct), this was resolved into sugar and carried by the hepatic vein into the general circulation; and, being more than normal in quantity, did not altogether undergo decomposition in the lungs (as it is conceived to do) but was excreted by the kidneys. Again, the deposit of fatty matter in the viscera generally, may admit of a similar explanation; for, I apprehend we must regard the fatty degeneration of the liver not as a primary affection, but as a secondary disease, resulting from the actual deposition of fat from the blood, it being found in a similar condition in almost all diseases attended by much emaciation. Perhaps the fatty ingesta in this case, not having been subjected to the vital and chemical action of the pancreatic secretion; had never reached a sufficiently organized state to undergo the necessary changes, prior to assimilation or secondary combustion.

"Looking at the case in all its bearings, it certainly appears to support Bernard's views, which I cannot consider entirely overthrown by the experiments before quoted."—*Glasgow Medical Journal*.

[This is a valuable addition to the six cases of Bright, Elliotson, Lloyd, and Gould, and supports, from the result of pathological observation, the experimental researches of Bernard with regard to the functions of the pancreas. In a memoir, published in the last number of the Prague *Vierteijahrschrift*, by Dr. Eisenmann, a seventh case is quoted by Lusanna, in the *Giornale Veneto di Sc. Med.* t. ii. 766, and an eighth case of his own is given. In the last two instances, however, the individuals recovered, the principal symptom having been discharged of fatty matters by stool.]—*Monthly Journal of Medical Science*, January, 1854.

12. *The Effects of the Recumbent Position during Syncope, physiologically considered.*—Mr. Richardson read before the Physiological Sec-

tion of the Medical Society of London (April 20, 1854) a paper on this subject. The author commenced by stating that though the fact, that the recumbent or horizontal posture often affords marked and immediate relief in syncope, is generally admitted, no very distinct attempt had hitherto been made to explain the principles on which it acted. One view, however, had fixed itself in the professional mind, and required to be carefully refuted. This view is, that the horizontal posture relieves syncope, by allowing the blood to gravitate to the brain and medulla, so that these centres, gaining energy by this process, react on the heart and supply it with new vigor. This theory had been supported by many writers, among whom the author quoted Dr. Alison, of Edinburgh, Dr. Ash, and Sir George Lefevre. The latter author relates a case in which syncope occurred on the patient assuming the erect position. It was found to be connected with the presence of varicose veins in the leg, and was prevented by the application of bandages. In this case, Mr. Richardson observed that the brain being deprived of blood was secondary to the fact that the propelling power of the heart was to a great extent lost through the mechanical impediment in the course of the circulation—an impediment which the bandages relieved. It was also obvious that the blood detained in the lower parts of the body could not reach the brain without first passing through the heart. Moreover, any renewed force which the heart might receive from the nervous centres would be quite useless until it contained blood on which to act. When we perform transfusion, we do so for the purpose of filling the heart with its natural stimulus, not for the immediate purpose of exciting the nervous centres. The recovery of consciousness on laying a person in the supine position is no proof of the correctness of the hypothesis above mentioned; for, when consciousness ceases during syncope, it ceases as a consequence of failure of the circulation, and returns in proportion as the circulation becomes re-established. Mr. Richardson had observed that the first symptom of recovery from syncope invariably was the return of the heart's beat, and that then muscular motion, consciousness, and animal heat followed. Again, in some instances, the action of the heart fails, while the functions of the nervous system remain perfect; and on the other hand the manifestations of the nervous system may be suspended by narcotic poisons, while the heart continues to beat with power. There may also be extensive disease of the cerebro-spinal axis, and yet the heart's action remains unaffected. Again, in the animal kingdom, the size of the heart and activity of the circulation bear no relation to the development of the nervous system; and, in the formation of the vertebrate embryo, the heart begins to pulsate before it is connected with any nervous centres. Mr. Richardson next proceeded to offer his own theory of the manner in which the recumbent position produces recovery from syncope. The explanation appealed to mechanical laws, and was very simple. It must be remembered, that the arterial blood sent from the heart first ascends, and that the venous blood descends from the upper and ascends from the lower parts. When blood is withdrawn from the upper part of the erect body, the heart loses its power of sending the blood along the aorta; hence the blood, losing the *vis a tergo*, gravitates in the veins in the lower half of the body. At the same time, the heart not having sufficient power to propel the blood to the brain and other parts, consciousness is lost, and

voluntary motion and the production of animal heat fail. Death would now soon occur, from the heart ceasing to pulsate, and from the blood coagulating in the veins; but the body falls, or is laid down, and then the blood contained in the veins of the lower part of the body is poured into the heart, and again it excites to contraction. Thus the whole circulation is restored, and the brain and every part of the body, receiving a fresh supply of blood, resume their proper functions; but to no one of these parts is due the least credit for having restored the movements of the heart. When blood is withdrawn from the lower part of the body, the chances of recovery are much lessened; for what was in the former case a reservoir, now becomes a running cistern. The recumbent position is here equally valuable, since it leads to a distribution of blood through the vessels above the heart. It might be even an advantage to put the head, in these cases, slightly lower than the trunk, until the cause of the hemorrhage was removed. But, in general, the recumbent position is all that is required. The manner in which the killing of calves is performed in slaughter-houses, was adduced by Mr. Richardson as an instance of the effects produced by position on the loss of blood. He next proceeded to speak of syncope dependent on an over-burdened condition of the heart, or on debility of the cardiac walls. In these cases, the recumbent position enables the blood to pass more readily into the pulmonary artery and aorta, while the venous circulation is rendered more equable. Mr. Richardson then referred to several experiments which proved to demonstration the truth of his theory. Having slowly narcotized a kitten, he laid bare the heart by a careful dissection, without opening the right plural cavity; he then punctured the arteria innominata, while the animal was suspended by the head. The heart continued contracting for some minutes, but at last the right auricle collapsed, and pulsation ceased. At this moment the body of the animal was reversed, and suspended by the heels. The auricle instantly refilled from the inferior cava, and the heart resumed its contractions. This was repeated with the same results. On another occasion, the vena cava inferior was tied previous to the reversion of the body, when no reaction took place until the ligature was removed. In a third experiment, the animal was suspended, in the first place, by the heels, and, the abdominal aorta being punctured in the middle, the auricle was allowed to collapse as before; the animal was then turned head upwards, when the auricle filled from the superior venous trunks. There could be no doubt as to the results of these experiments.—*Medical Times and Gazette*, April 22, 1854.

Materia Medica and Pharmacy.

13. *Local Anæsthesia*.—The production of local anæsthesia in disease by the direct application of the vapor of chloroform, was first brought into notice by Dr. Hardy of Dublin, and has lately excited much attention. (*Dublin Quarterly Journal*, Nov. 1853) The instrument, which he invented for the purpose, consists of a small metallic cylinder holding a sponge; a pipe is fixed at one end, and to the other end a gum elastic bottle is attached, provided with a valve for the admission of air. When the sponge is moistened with chloroform, pressure on the elastic bottle

forces the vapor through the pipe, and the jet of vapor can be applied directly to the affected part. The first effect produced by the application of the vapor is a sensation of heat, which may even cause uneasiness; but this is quickly succeeded by the subsidence and complete removal of pain. The relief is said to be as speedy and perfect as it could be by inhalation, and is so permanent that the pain does not return again for several hours, and then only in a mitigated degree; and there are no unpleasant subsequent effects, such as occur after inhalation, or after the use of narcotics. Dr. Hardy relates several cases, mostly of uterine disease, and generally of a very painful and distressing kind, in all of which immediate and complete relief was afforded by the anæsthetic douche. His first case was one of cancer of the uterus, where the excessive suffering was completely removed in a few minutes by the chloroform vapor; and, when the pain afterwards returned, the same means were always resorted to, with a like effect. In his second, third, fourth, and fifth cases, which were examples of uterine disorders, attended by great pain of the back and womb, the douche applied to the uterus caused the cessation of the pain, first in the back, and afterwards in the womb. In a case of great irritability of the nipples, in various other forms of local irritation and particularly in a case of pruritus pudendi, the anæsthetic application was equally successful. From this experience of its action, Dr. Hardy considered the local application of chloroform to be preferable to its inhalation.

Thus strongly recommended, the practice was repeated lately in Paris pretty extensively, but, unfortunately, the same success has not attended it. At first, indeed, M. Nélaton, after applying the douche, incised an abscess on the foot without the patient showing any symptoms of pain; and M. Dubois produced insensibility in a painful abscess of the axilla and wound of the back of the hand. But, with these and a few other exceptions, the douche has generally failed to produce anæsthesia in surgical operations. Velpeau used it, without success, in a case of abscess and of cancer; Giraldes and Nélaton, in subsequent trials; Gosselin and Ricord found no effect produced by it; and Roger found it completely ineffectual in producing anæsthesia on the sound skin. Laugier, however, states that he has found this method of service: and, in a case of painful stump after amputation of the thigh under M. Larrey, the patient felt great relief from his sufferings after the chloroform application. With the view of increasing the effect, several modifications of the original apparatus have been devised. M. Richard used a much larger reservoir of chloroform, and expelled the vapor by means of bellows. In a case of fistula in ano, in which he employed this apparatus, however, no other effect was produced except a sensation of cold; the incisions were as painful as they generally are. M. Maisonneuve having to perform amputation of the toe, enveloped the foot in an India-rubber bag, in which chloroform was poured, so as to keep the part in an anæsthetic vapor bath; but, instead of insensibility, a painful feeling of burning, and so much local hyperæsthesia were produced, that the operation had to be put off till next day. In short, the method had so completely disappointed expectation, that the surgeons have latterly entirely abandoned it. M. Velpeau, indeed,

thinks that ether and chloroform cannot produce anæsthesia unless they are absorbed by the lungs; and he looks upon Dr. Hardy's cases as not at all conclusive, in consequence of the irregular duration of uterine pains, and their frequent spontaneous disappearance. Yet, even in uterine cases, M. Dubois has renounced its use as quite ineffectual. In consequence of the failure of Dr. Hardy's plan, attention is now being directed to other local anæsthetics. Velpeau still uses in many cases the production of cold by a freezing mixture of ice and common salt; and the cold produced by the volatilization of ether and chloroform has lately been tried, as likely to be more efficacious than the douch. M. Ricket has employed this local anæsthesia by refrigeration in two cases, with partial success. The chloroform or ether was dropped upon the part, and its volatilization hastened by a current of air from a ventilating apparatus which M. Mathieu has invented. The incisions which were made in the part caused so little pain, that there could be no doubt that the sensibility was deadened by this means. †

[However deficient in success hitherto, local anæsthesia is of such great practical importance, that it well deserves to be investigated and carried out, with all the appliances and resources of modern ingenuity. We understand that Professor Syme and Simpson have made trial of the anæsthetic douche in cases of abscess, but although a slight and superficial impairment of the sensibility was noticed, no diminution of the feeling of pain took place. Dr. James Arnott's plan, of freezing the skin and subjacent parts, seems to us well adapted for minor operations in surgery, and we feel surprise that it has not been more extensively tried in this country.—M. Velpeau has pronounced strongly in its favor. M. Richat has published some cases of operations performed without pain, by means of an ingenious apparatus, constructed by M. Mathieu (figured *Gaz. des Hop.* April 1.) By this instrument, a fair amount of ether and of air is simultaneously directed to the part. Dr. Liégard (de Caen) has pointed out that the peasants in Lower Normandy have long been in the habit of preventing pain by squeezing strongly the forearm or leg, when operations are performed on the hands or feet.]—*Monthly Journ. Med. Sci.* May, 1854

14. *Production of Local Anæsthesia.*—Dr. Snow in a paper read before the Physiological Section of the Medical Society of London (April 10, 1854,) said that when a piece of folded lint moistened with chloroform was applied to the skin, and covered with some impermeable substance, it caused a sensation like that occasioned by a mustard poultice, and the skin became red. After the lapse of a few minutes to half an hour, there was a feeling of numbness in the part, and its sensibility was diminished, so that pricking with a needle did not cause so much pain as usual. He had never succeeded, however, in causing complete anæsthesia by chloroform applied to the sound skin, nor had he been more successful with several other agents he had tried. Hydrocyanic acid of 5 per cent., and a strong solution of cyanide of potassium in water, caused a diminution of sensibility, with less irritation, than any of the other medicines. The dif-

† *Gaz. de Hopitaux.*

difficulty of causing local anæsthesia depended on the slow and sparing manner in which fluids permeated the cuticle, and the readiness with which the small quantity which did permeate was carried away in the blood. When the skin was denuded of cuticle, it was readily made insensible, even by the vapour of chloroform confined over it, and the raw surface could be rubbed without causing any sensation. The only means they as yet possessed of producing complete local anæsthesia was that of refrigeration, proposed by Dr. James Arnott. When a part was cooled by the application of a mixture of pounded ice and salt, it became of the color of parchment, as hard as suet, and perfectly insensible. The insensibility, however, extended to only a very slight depth. He had congealed in this manner part of the palmar surface of the hand and fingers, but, on separating the latter, and examining the dorsal surface of the web which connects them, he found it quite sensible to the pricks of a needle, even when removed from the hard and insensible palmar surface by a thickness of only the tenth of an inch. The burning pain caused by the application of ice and salt to a sensitive part, such as the hand or fingers, was very considerable, and it was still greater about 5 minutes afterwards, when sensibility returned. In fact, if he (Dr. Snow) required the application for any other purpose than to watch its effects, he would inhale chloroform while it was done. He therefore did not think this process very available, even for superficial operations, except when the surgeon or the patient had an objection to the inhalation of chloroform. A new plan had lately been tried in the hospitals of Paris, with some amount of success, in preventing the pain of minor operations by refrigeration. It consisted in dropping ether on the part, and increasing the evaporation with the bellows. He (Dr. Snow) had tried this on a patient of Mr. Ure, in St. Mary's Hospital, preparatory to his dividing the callous edges of an ulcer of the leg. It was quite successful at that edge of the ulcer where the ether had chiefly fallen, but less so at the other side. This process caused less pain than the application of ice and salt; and M. Mathieu, an instrument maker of Paris, had contrived a means by which it could be more effectually applied than in the above case.—*Med. Times and Gaz.* April 22, 1854.

15. *Modes of Exhibiting Cod-liver Oil.*—Those who have had large experience of the use of cod-liver oil must have been astonished at the surprising way in which, in a great majority of cases requiring its exhibition, it agrees. It is not easy to mark out beforehand any class of symptoms which contra-indicate its employment, if the existence of strumous disease call for it. Often symptoms, apparently the most likely to be aggravated, are removed or mitigated by its use in a way which surprises both patient and prescriber. Thus, in phthisical cases, a red tongue, acid eructations, biliousness, heartburn, liability to sick headaches, aching pain between the scapulæ, an instinctive and intense dislike to fat or greasy aliment, are symptoms which, without a question, may be remedied by the use of cod liver oil. These statements, are of course, applicable only to a certain proportion of cases; there are others in which its use is clearly indicated, but in which the prescriber's ingenuity is taxed to the utmost to get

the patient to bear the remedy. The following memoranda on this part of the subject, founded on our observations of the practice of the various London hospitals, but more especially of the City Hospital for Diseases of the Chest, may probably be acceptable to some of our readers.

Cases in which difficulty occurs may be divided into the following classes: 1. *Those in which the nauseous taste of the oil forms the obstacle.* In these, the use of the pale oil will generally obviate the difficulty; it is however, four times the expense of the brown, and is more liable to be adulterated, which are great objections. The taste of the brown oil may often be concealed by taking it floating on some bitter menstrum. A wine glass full of strong coffee, of ginger wine, of infusion of quassia, or perhaps, best of all, a quinia draught, containing a drachm of the tincture of orange peel, may serve this purpose. The oil may be stirred up in a little hot milk, and swallowed so warm that the sensation of heat overpowers the taste. Should these expedients fail, the patient may be instructed to put into the mouth a teaspoonful of marmalade or black currant preserve; and having lubricated all parts with the sweetmeat, so as to fully absorb the attention of the gustatory nerve, then swallow the oil. Advantage frequently results from closing the nostrils when taking the dose. 2. *Those in which the oil excites sickness and is quickly rejected by vomiting.* Many of the expedients mentioned above will obviate also this source of difficulty, more especially the use of bitters. Very few cases, indeed, will resist the influence of hydrocyanic acid and bismuth exhibited three times daily for a few days preparatory to the trial of the oil, and continued during its employment. Patients should be directed to eat a little dry biscuit or bread crust before the oil, and then to take it floating on a cup of the coldest spring water. If these fail, as a last resource, the dose should be given in the recumbent posture, that is, in the morning, an hour or two before getting up, and in the evening, after going to bed. This last suggestion is one emanating, we believe, from Dr. Birkett, of the City Chest Hospital, and often answers very satisfactorily. 3. *Cases in which the oil cannot be digested.* This a large and very important class. Patients complain that they have a great repugnance to the oil, that it makes them feel sick for hours afterwards, though seldom causing actual vomiting; that everything they take afterwards, seems to taste of it, and that thus all relish for food is destroyed; that the oil "rises," either oily or with a most nauseous acid flavor. They frequently have bilious attacks; and, for a day or two in each week, probably the repugnance to the remedy is so great that they are quite unable to overcome it. If pushed under these circumstances, the oil does more harm than good: there are, however, extremely few such cases in which careful attention to the digestive organs will not enable its administration to be successfully conducted.

We copy the following formula from the Pharmacopœia of the City Hospital for Diseases of the Chest, where it is in general use for the relief of the condition alluded to:

"℞. Rad. rhei ʒiij; rad. zingiberis ʒij; rad. gentian. ʒiiss; sod. carbon. ʒiij; aque pur. lbviiij."

The roots having been cut into small pieces, the infusion is

made with cold water, and after standing in a cool place for about 12 hours, is strained. The mixture is clear and bright, and not in the least disagreeable to take. In cold weather it keeps well; but in summer the addition of some tincture is necessary to prevent it from becoming thick. If cough be present, it is usual to combine with each dose from half a drachm to a drachm of paregoric; if sickness, from two to three minims of the hydrocyanic acid; and if the signs of atony, a small quantity of the tincture of gentian, calumba, or hop.

By the use of this mild stomachic (a wine-glass full thrice daily), for a week or two before commencing the oil, and then continuing it during the exhibition of the latter, many patients have been induced to bear it with advantage, who had failed in other prior attempts to do so. The mixture is so mildly aperient that it almost never purges, and it may be continued for months together with the effect of improving most markedly both the appetite and the digestion. 4. *Cases in which the oil, although taken easily, cannot be borne in full quantity, and does not appear to produce much benefit.* In many cases of phthisis coming under this head, the combination of tonic medication with the use of the oil often answers well. So generally, in fact, is advantage derived from such combination that at the Hospital for Chest Diseases there are very few patients, indeed, who take the oil alone. In almost all it is exhibited together with either the stomachic mixture above noticed, or some form of tonic. The favorite tonics are the sulphates of quinia and iron (gr. j with gr. ij ter die), or the sesquichloride of iron. The latter is extensively prescribed with the mineral acids in infusion of quassia; or, if the stomach be delicate, in the following more elegant form, which is a prescription of Dr. Risdon Bennett's: *R. Tinct. ferri sesquichl. ℥x; acid. nitrici dil. ℥x; syr. zingib. ʒss; aq. menthæ viridis ʒj. Ft. haust.*

Notice has been made repeatedly in our hospital records during the last two years of the practice of combining the use of cod-liver oil with that of mercury, in small doses long continued, which prevails extensively at the Hospital for Skin Diseases, in cases of lupus and cutaneous struma, and at several other institutions, in the treatment of chronic disease of the joints. This kind of treatment is becoming increasingly prevalent, and is certainly very applicable to many forms of strumous inflammation. The plan of giving the oil to counteract the depressing effects of a mercurial course for the cure of syphilis in cachectic states of the constitution, has also been previously mentioned, and is well worthy of being borne in mind.—*Med. Times and Gaz.* May 13, 13, 1854.

From the Virginia Medical and Surgical Journal

On Insufficient Alimentation, and the Value of Phosphate of Lime in Nutrition.

In the *Bulletin de l'Académie Imperiale de Médecine*, for January, 1854, we find a report by M. Bouchardat, on the researches of a young

and learned chemist, M. Mouries, in regard to the effects of phosphate of lime in the nutrition of animals, and the influence which the judicious employment of this salt is capable of exercising upon the mortality of children in large cities.

It has been a comparatively short period since physiologists began to appreciate properly the importance of inorganic principles in the phenomena of life. The farther we penetrate into this complex problem, the greater is the importance attributed to bodies, the presence of which in the human organism was regarded as quite accidental.

Very dissimilar organic compounds may be substituted for each other in our diet without any disorder in the general harmony, but the inorganic principles can only be replaced by substances very closely analogous to them. Albumen, fibrin, and casein, and other more complex aliments, though differing in origin and composition, may fulfill the same physiological end, but it is different with inorganic principles. Lecanu has shown that iron is indispensable for the proper constitution of blood globules; chloride of sodium is of primary importance also as a constituent of the liquor sanguinis, and it is only as an exception that we find, in certain graminivora, this salt partially replaced by the phosphate of soda or of potash. Liebig has shown that the chloride of potassium of the muscles cannot be replaced by chloride of sodium. Each inorganic constituent of the organism has, therefore, its definite and limited sphere of action, to which it is exclusively adapted.

Among the indispensable inorganic salts, the phosphate of lime holds an important rank. M. Mouries has devoted himself to the elucidation of its peculiar action. He deduces from his experiments the following conclusions;

1. Phosphate of lime plays a more important part in nutrition than has heretofore been believed. Independently of its necessity as a constituent of bone, this salt maintains that irritability without which there is no assimilation, and consequently no nutrition. Its insufficiency, therefore, produced death with all the symptoms of inanition, while its insufficiency in a less degree, produces a series of lymphatic diseases.

2. The food consumed in cities is deficient in this respect. Nurses' milk has, consequently, the same defect. The infant as well as the fetus suffers from the deprivation of this element so indispensable to its development and life. Hence one of the causes of the increase in the number of still-born children, and of the mortality of infancy.

3. The addition of this salt, in combination with animal matter, to alimentary substances, obviates one cause of disease and death.

The following are the principal facts on which M. Mouries relies to establish these conclusions:

The blood of animals contains a constant proportion of earthy phosphates, which is independent of their ingesta. The pigeon ingests phosphate of lime slightly in excess, in the grain and calcarious gravels which it picks up; the horse swallows an excess, in its fodder; the dog procures a still greater excess from the bones on which he is fed; and yet the blood of the pigeon contains in 1000 grammes 1.20 of phos. of lime; the horse 0.5; the dog 0.4. This result is not accidental; all birds

whose blood has been analyzed have 1.5 to 1.2 of phosphate of lime, while the proportion in the blood of the carnivora and herbivora varies from 0.9 to 0.4. The proportion thus regulated by nature, is modified by age and sex. The bull, cow, and calf have the same food, yet their blood contains respectively 0.5, 0.9, 0.8 of phosphate of lime.

The requisite proportion of alkaline phosphates varies, therefore, in different animals. A pigeon weighing one pound died at the end of ten months during which period he was fed daily on one ounce of wheat, with common water for a drink, by which rather more than a grain of phosphate of lime was ingested daily: on the other hand, a woman weighing 100 pounds enjoyed perfect health upon a diet which furnished her daily with 90 grains of phosphate of lime. Thus health in the one case, and death in the other, with relatively equal quantities of this salt.

We shall recur to this example to show how complex are the conditions of these experiments, and what reserve is necessary in drawing conclusions from them.

M. Mouries asserts,"and the fact has already been noted by Chossat, that if the proportion of alkaline phosphates of the food is deficient, there ensues atony of the digestive organs, imperfect assimilation, and death. To prove that pigeons die from want of phosphate of lime, we may observe that their death is hastened if they are allowed only distilled water, while their lives may be preserved by adding earthy phosphates to their food.

M. Bouchardt observed that the grain on which MM. Mouries and Chossat fed their pigeons, contained only traces of common salt. The birds, therefore, should be expected to suffer from the deprivation of this principle. M. Bouchardt accordingly made this experiment; he confined two pigeons, and fed them on dried grain. In two months the health of the female became impaired; she suffered from thirst and diarrhoea and laid no more eggs. She was set at liberty. She flew immediately to a window-sill impregnated with alkaline chlorides, and began to peck eagerly; there was a larger quantity of salts on the interior of the window-frame; the pigeon entered through the open window, and permitted herself to be re-captured, so imperious was her demand for these principles. Her health was reëstablished; in three days she laid another egg. It is wrong, therefore, to conclude with M. Mouries that a deficiency of phosphates is the only cause of the symptoms he observed; in this case, the absence of chlorides was the obvious cause.

M. Mouries has established, by interesting calculations, that grain furnishes a sufficient supply of phosphate of lime for the reparation of bone, but not for other essential functions of the economy. From the curious fact that there is a constant proportion between the temperature of animals, and the amount of phosphate of lime contained in their blood, he deduces the principle that this salt keeps up animal irritability, without which nutrition is impossible. The following table must interest physiologists:

PHOSPHATE OF LIME. TEMPERATURE.			
Mouries Poggiale.			
Blood of the duck,	-	1.50	42°5 cent.
—— the hen,	-	1.35 1.25	41°5 “
—— the pigeon,	-	1.20 1.23	40° “
—— man,	-	0.80 0.6	37°5 “
—— horse,	-	0.40 0.5	36°8 “
—— frogs,	-	a trace.	9° “

If these results are confirmed, it will appear that the ingestion of phosphate of lime is not only indispensable for the reparation of bone, but that it is connected with the function of calorification.

In the second portion of his memoir, M. Mouries, starting from the principle demonstrated by Chossat, verified by Boussingault, taught by Berard, and now admitted by all physiologists, that diet is defective which does not contain enough phosphate of lime to repair the waste which is continually going on in the economy, attempts to prove that the food commonly consumed in cities does not contain the quantity of this salt which is required by nurses and pregnant women.

He commences by calculating the quantity of phosphate of lime which ought to be ingested in the twenty-four hours, which he estimates from analyses of the excreta at 110 grains. He then attempts to show that this quantity is not contained in the food of nurses in cities. The urine of women in the country contains 90 grains of phosphate of lime in the twenty-four hours, while the amount of this salt in the urine of women in cities, varies from 20 to 90 grains. M. Mouries has sought to confirm his hypothesis by direct proofs; he has examined the food consumed in cities, and shown that it exhibits a deficiency of one half in alkaline phosphates. He has examined the milk of nurses, and shown that in 18 healthy country women the proportion of earthy phosphates in the milk, varied from 1.2 to 24 *per cent.*, while in the milk of ten Paris nurses the proportion varied from 0.5 to 0.9, and in seven others there was only a trace of phosphate of lime.

In the third portion of his essay M. Mouries adduces clinical facts in illustration of the advantage of supplying this deficiency of phosphate of lime in aliments. In 13 cases, in which the proportion of phosphate of lime averaged 0.7, 75 grains of this salt with twice that quantity of albumen was daily administered in soup; in a week the proportion of earthy phosphate in the milk rose to 2.1. In five cases pregnant women were subjected to the same treatment; the milk, after delivery, contained 1.9 to 2.1 of phosphate of lime. Only three of the eighteen children died.

These results, though insufficient to determine such a serious question, are yet very worthy of attention. In the debate to which they gave rise, M. Gibert vehemently condemned the present tendency of chemists to interfere in medical inquiry. The question of lactation was a medical one, he said, and was only to be solved by clinical observation. M. Bouchardt, on the other hand, feared only ignorance, and was not alarmed at the application of chemistry to medicines, especially when its results were as inoffensive as those he had discussed.

On Hydrophobia as it occurred in France in 1852. By M. AMBROISE TARDIEU.

In the year 1850, the minister of agriculture and commerce, on the recommendation of the committee of public health, sent a circular to every prefect in France, requesting him to give information regarding any cases of hydrophobia which might occur in his department. A number of reports were in consequence sent in, but as these were in some respects incomplete, a fresh circular was issued, detailing more particularly the manner in which the cases should be recorded. From the information so obtained, M. Tardieu drew up a report regarding the cases which occurred in the years 1850-51, as well as in 1852. As the report for the year 1852 is much more complete than the others, we subjoin an abstract of it.

1. The number of cases of hydrophobia which occurred in France during the year 1852, was 48. These were observed in 14 departments: the department in which the greatest number occurred was that of the Hautes Alpes (in the southeast of France, latitude between 44 deg. and 45 deg.); while the department of Lozère (also in the south, and having the same latitude as the other) came next.

2. With regard to the sex; 36 of the 48 cases were males, 12 females: the proportion in the two preceding years was almost the same.

3. The following table exhibits the ages of the subjects affected with hydrophobia:

Below 5 years, in 1852,	3	in two former years,	4	=	7
From 5 to 15	16	"	"	14	= 30
" 15 to 20	4	"	"	11	= 15
" 20 to 30	3	"	"	9	= 12
" 30 to 60	17	"	"	37	= 54
" 60 to 70	1	"	"	7	= 8
Above 70	0	"	"	6	= 6
Not mentioned	4	"	"	0	= 4
	48			88	= 136

This table shows the incorrectness of the opinion which ascribes the disease to the effects of terror, for it shows that 7 children under five years of age have been attacked.

4. All the cases which occurred in 1852 originated in the bites of dogs, except one, where the bite of a cat was the cause of the disease.

5. The situation of the wounds inflicted by the rabid animals was as follows in 48 cases:—On the face, 13 times; on the upper extremities, 15; on the lower extremities, 12; not mentioned, 8. In two of the cases the disease was communicated by pet dogs which were accustomed to lick their master's faces, and where excoriated lips were the seat of the inoculation.

6. In 40 out of the 48 cases the date of the inoculation has been observed. It occurred in March, April, and May, in 10 cases; in June,

July, and August, 16; in September, October, and November, 4; in December, January, and February, 10.

7. It seems a considerable number of individuals who are bitten by rabid animals escape the disease. During 1852 some observations were made on this point, and it appeared that out of 44 persons bitten, about the same time 23 only were attacked.

8. The period of inoculation of the disease was exactly noted in 20 cases. It was as follows:—Less than a month in 8 cases: from 1 to 3 months 10; from 3 to 6 months 1; 11 months, 1.

9. The duration of the disease in 20 cases was 2 days in 6 cases; 3 days in 8; 4 days in 5; 6 days in 1.

10. The termination of *confirmed* cases of hydrophobia was constantly fatal. Of the 48 cases, it appears that only 27 came under this category; in the others the effect was merely local. In 12 of these 27 cases no precaution was taken, in 4 no mention is made of this circumstance. In 8 of the remaining 11 cases cauterization was resorted to immediately, in 3 at a late period. Of the 21 individuals who escaped (see ¶ 7) cauterization was energetically performed in 12 cases; the details of the other 9 have been omitted.

11. As to the mode of cauterization employed, the actual cautery was used in all cases but 5, and these were treated by protonitrate of mercury, nitric acid, ammonia or butter of antimony. In Germany it has been proposed to excise the bitten parts and then to wash the wounds with a solution of caustic potash.—*Annales d'Hygiène.*

On the Influence of Belladonna in Counteracting the Poisonous Effects of Opium. By THOMAS ANDERSON, M. D.

Dr. Graves had first suggested that, in continued fever, with protracted pupils and coma, if an agent, administered internally, would occasion dilatation of the pupils, it might also relieve the other symptoms of cerebral derangement. Dr. Anderson, acting on this theory, administered large doses of belladonna in two cases of poisoning by opium, which he related as follows:

“A patient of whom I had charge, and laboring under delirium tremens, having received an overdose of a solution of the muriate of morphia, became comatose. He had taken, in thirty-six hours, two ounces of the solution of the muriate of morphia, and it had been continued by the attendant after sleep was procured. When I saw him he was in profound coma, his breathing was stertorous, amounting to no more than four or five per minute, and his pupils were contracted to mere points. His pulse was excessively weak, and rather slow; it was quite impossible to rouse him. I ordered him, immediately, the following mixture:—Tincture of belladonna, six drachms, in five and a half ounces of water, of which an ounce was to be given every half hour. Three ounces of the mixture were administered with great caution, after which his pupils began to dilate. The six drachms of the tincture of belladonna were

taken, and in four and a half hours after the first dose of it was given, the patient was in the following condition:—The coma was entirely gone, respirations were between twenty-two and twenty-five per minute, the pupils were much dilated, the pulse had risen to nearly one hundred and twenty in the minute, and was also increased in strength. His countenance, also, from being cold and pallid, had become much flushed, and the whole body was much warmer. He replied, readily and coherently, to all my questions. He continued to improve for three days after, when, rising suddenly to stool, he fainted, and before the assistance of the nurse could be procured, he was dead.

A fortnight afterwards, a woman about 50, took, at four P. M., two drachms of laudanum, and, at half past five P. M., three drachms more. She was brought to the infirmary at eight P. M. After making vain attempts to rouse her from the coma, by walking her about, &c., the stomach-pump was used at a quarter past eight P. M. By this means her stomach was thoroughly evacuated, but no trace of opium was detected by smell or sight. It had, probably, been all absorbed. A current of electricity was then applied to her hands for nearly ten minutes, but without rousing her. I saw her at a quarter to nine P. M., for the first time, and on being told that she had been poisoned by laudanum, I determined to try the effects of belladonna.

At that time her pupils were contracted to mere points, her respiration was stertorous, ten per minute, the pulse was feeble, and the extremities rather cold. Between nine and half-past nine, I gave her one ounce of tincture of belladonna in three ounces of water, which was all swallowed, but with difficulty. In the course of the next half hour, two drachms more were administered. At eleven P. M., the first alteration on the size of the pupil was observed; the respirations had also then increased to twelve or thirteen in the minute, and the pulse was much stronger. The symptoms continued to improve till two A. M., when all indications of opium poisoning had disappeared. The woman was then sitting up in bed talking to the nurses, with pupils dilated to a little more than their natural size, and still slightly sensible to light. The extremities were quite warm, the pulse about 100, and of good strength.

She gave me a coherent account of her motives for taking the poison, of the amount of money she had spent in purchasing the laudanum, and the names of the druggists where it had been procured. She also replied sensibly to questions about her family, and the ages and occupations of her children. She continued awake till nearly four A. M., after which she slept till nine A. M. In the morning I found her pretty well, her pupils being no more dilated than they were four hours after the first administration of the belladonna. She complained, however, of nausea, but unaccompanied with vomiting. This symptom along with the dilated pupils, had entirely disappeared in the course of two days. She was kept in the hospital, under observation, for ten days after the accident, at the end of which time she was dismissed, perfectly well. The tincture of belladonna, used in both these cases, was of the strength of four ounces of the leaves to two pints of rectified spirit, and prepared by percolation. Half a drachm is considered a full dose. I have seen dilatation of the pupil produced by a drachm given at once.

The committee on Dr. Anderson's communication, reported that they had designed to test Dr. Anderson's views by experiments on animals, but had found, on inquiry, that the animals commonly used for experiments were almost entirely insusceptible of the poisonous action of opium or belladonna. Where the effects were so different from those observed in man, it is obviously impossible to pursue the investigation which they had intended; the committee, therefore, while recognizing that Dr. Anderson's views require more extended observations in order to confirm them, deemed them worthy of the attentive consideration of the Society.—*Edin. Monthly Journal.*

From the American Journal of Medical Sciences.

Tapeworm expelled by Infusion of Pumpkin Seeds. By D. LEASURE, M. D., of Newcastle, Pa.

Mary —, aged 28, unmarried, has been delicate all her life, and for fifteen years subject to severe cramping pains of the abdomen, accompanied sometimes by obstinate vomiting. About ten years since, she noticed that she passed portions of tapeworm, of lengths varying from a single joint up to many feet, and, if the statements of the patient and her mother are to be relied on, sometimes half filling an ordinary chamber-mug. Her mother had also, at an early period of her life, been a victim to a tapeworm, which had been expelled by a secret *vegetable remedy*, probably *male fern* given her by a worm doctor.

My attention was called to Mary's case sometime in last February, while in attendance on her sister for another disease; but from causes not necessary to mention, I did not prescribe till last week. I had intended to use the male fern or kousso, or both; but not having access to either of them in a fresh state, I determined to wait till they could be procured from Philadelphia. While thus waiting, I noticed in one of the journals a report of a case of *tænia* expelled by the use of emulsion of pumpkin-seeds. Curiosity, more than the expectation of success, prompted me to give it a trial. I directed a *pint* of the bruised seeds to be infused in three pints of soft boiling water, and left over night, the whole to be taken during the next day, the patient fasting in the mean time.

On the morning of the 9th of May, the patient commenced its use, and in the afternoon experienced the most violent cramps and pains in the bowels for several hours; and on the morning of the 10th she passed eleven feet of the parasite, including the head, as proved by observation under the microscope. The animal was entirely dead when voided from the bowel, and is a most beautiful specimen of a perfect *tænia*.

EDITORIAL.

*Fifth Annual Announcement of the College of Medicine and Surgery
of the University of Michigan, for Session 1854-5.*

This announcement is before us. For the principal points of information in it, we refer the reader to the advertisement on our cover. Copies can be obtained by addressing the Secretary, Prof. A. Sager, Ann Arbor. The arrangements which have been made for the next session are such as to add much to the attractiveness and excellence of the course. The increasing prosperity of all departments of the University, shows the practical usefulness of the system of free education.

*Annual Report of the City Inspector of the City of New York, for
the year 1853.*

This is a very elaborate report comprising a great number of tables which show the mortality for each month, with the causes of death, the sex, age, nation, color, &c., of the deceased. There is also a meteorological table for the year, and an extensive table showing the mortality for the last fifty years. The total number of deaths for 1853, was 22,702, at the average age of 16-54 years. The births during the same time, were only 10,157. In both births and deaths, the number of males predominate.

Third Annual Announcement of Miami Medical College.

The session of this College commences on the 30th of October, and continues till the last of February. The corps of Instructors is full, and the situation of the College eligible.

Annual Announcement of the Medical Department of St. Louis University.

This School opens its next session on the first day of November, and seems to be in a prosperous condition. We are pleased to notice that the museum is receiving increased attention, and that a department of comparative Anatomy has been added to it. Preliminary Lectures are delivered during the month of October.

Thirty-Fifth Annual Announcement of the Medical College of Ohio.

The Lectures in this Institution commence on the 30th of October and continues four months. It is conducted by men of well known character and ability, and its long existence entitles it to the honor due to pioneer institutions.

Cholera.

This disease has shown itself in several places. In Detroit it has prevailed to some extent, but not alarmingly, except among emigrants. In Toledo, a number of cases have been reported. In Ann Arbor, four cases were put off from the cars of the emigrant train, three of whom died. Two other persons also, who had been traveling took it. In Chicago, it has been pretty severe, and many of the better class of families have removed to spend the hot season in the villages of Michigan and elsewhere. In New York and other large cities, it is prevailing to a considerable extent.

Death of Professor Fox.

The loss of this gentleman from the University, and from all the enterprises which have for their object the development of the Agricultural interests of the State, will be severely felt. He was a native of England, and a clergyman of the Episcopal Church. He had retired from the active duties of his original profession, and devoted himself with great enthusiasm to practical Agriculture—the cultivation of the Natural Sciences, and to Agricultural Literature. He had established an Agricultural paper of a wide circulation, and was recently appointed Professor in the Agricultural department of the University of Michigan. Such a singular urbanity of manner, generosity of heart, and enthusiasm in Science, we have seldom met, and his loss is regretted by his colleagues with more than the ordinary sorrow of such occasions.

MISCELLANEOUS.

Feasts of the National Medical Association.—The “North-Western Medical Journal” has an excellent Editorial, advocating the abolition of the expensive entertainments hitherto given to this body, and setting forth the bad taste which converted such a dignified body into an assemblage which wine rendered so nearly riotous, that not a speech could be heard above the noise. The high position which the Editor of that Journal holds in the Association, will, we trust, give influence to his words, and help to suppress this evil. Let the meeting at Philadelphia be one all parts of which will be remembered as worthy of men of thought.

Dr. Goadby.—This celebrated Microscopist and Demonstrator of Minute Anatomy has been delivering a course of lectures in Detroit. He has since gone to Chicago. Some of his splendid preparations exceed any thing we have ever seen, especially the minute injections. Those who may have an opportunity to attend his lectures should avail themselves of it without fail.

Delirium Tremens among the Troops in Canada.—According to the “Montreal Medical Chronicle,” Delirium Tremens has more than doubled its percentage among the troops, during the last thirty years, and the ratio of deaths to the whole number of cases is increased one third. This shows either bad discipline, and degeneration of Medical treatment in the British army, or else defective statistics. Probably the latter.

Deaths from Chloroform.—The “Medical News” has collected three more cases of death by Chloroform, two of them at least in the most careful hands.

“Who Slew all these?”—Civilians think that shot kills most soldiers; but Colonel Queach, who served throughout the Peninsular campaigns with the old 95th Rifles, says that 40,000 men were killed in action, or died of wounds. 120,000 died of disease, a great deal of which was rendered fatal by the want of proper medical attendance; while 120,000 more were by disease rendered unfit for service.—“London Lancet.”

Railroad and Steamboat Accidents.—The “Railroad Record” states that, from January 12, 1853, to April 6, 1854, there were in the U. S., by Steamboats, killed, 527; wounded, 2083. By Railroad, killed, 495; wounded, 1107. There is something mysterious in the subject of steam-boiler explosions, which all the researches of engineers and chemists, have not yet elucidated. It seems to be proven that there are at least two kinds of explosion, and that the swelling and bursting which is produced from the over-pressure of steam is entirely different from that sudden and unaccountable explosion which sometimes occurs under the ordinary use of the engine, and which more resembles the effect of gunpowder than anything else, rending the boiler from its arches and hurling it a score of rods through

the air. The "spheroidal state of steam;" the generation of explosive gasses etc., etc., have all been brought in to explain the phenomena, but the full solution of these terrible phenomena is yet to be made. At present, the action of steam boilers among machines, is sometimes as strange and unaccountable as that of chloroform among medicines.

Ipecacuana to Produce Pustulation.—The "St. Louis Medical Journal" says that Ipecacuana, externally applied, will produce pustulation, like Tartar-emetic; and that the pustules heal without leaving any scars.

Starling Medical College.—This Institution has been re-organized, and is to open its next session on the 30th of October, and continue 16 weeks.

American Journal of Insanity.—Dr. T. R. Beck, the distinguished Editor of this Journal, has retired from the Chair.

Michigan State Hospital for the Insane.—Dr. John P. Gray, now Acting Superintendent of the New York State Lunatic Asylum, has been appointed Superintendent of the Michigan State Hospital for the Insane, at Kalamazoo. He will, however, remain for some time in his present situation.—"N.Y. Med. Times."

Obituary.—Died of Cholera, at Detroit, on the 24th of July inst., Rev. CHARLES FOX, Professor in the Agricultural Department of the University of Michigan, and editor of the *Farmers' Companion* and *Horticultural Gazette*.

The following preamble and resolutions were adopted at a meeting of the Faculty of the University, convened on the occasion of the death of Prof. Fox:

Whereas, We have just received the painful intelligence of the death of the Rev. Prof. Chas. Fox; and *whereas*, we deem it due to his memory, to the respect we owe his family, and to the emotions of our own hearts, to give utterance to the feelings which this event has awakened, Therefore,

Resolved, That our warmest sympathies be tendered to his bereaved consort and surviving children, with the hope that the example of one who lived nobly and died at the post of duty, may alleviate their grief and strengthen them in their affliction.

Resolved, That Prof. Charles Fox had greatly endeared himself to us by his equanimity of temper and eminent social excellencies, by his accomplished education and varied acquirements, by his zeal in the cultivation of science, by his ardent and untiring efforts to promote the highest good of society, and by his liberal and controlling Christian principles and character.

Resolved, That science has lost in the death of Prof. Fox, one of her most ardent, industrious and successful votaries—the University of Michigan, one of her most efficient and promising professors, while the Agricultural interests of the University and of the State have been deprived of a friend, and advocate, and laborer whose various and extensive acquirements in natural sciences, united to his thorough practical experience, had placed him so prominently in the front rank of agricultural writers, that we know not where to look to fill the place which his untimely death has vacated.

Resolved, that a copy of these resolutions be transmitted to the family of the deceased.

H. P. TAPPAN, *Pres't. of the Faculty.*
A. WINCHELL, *Sec'y.*

UNIVERSITY OF MICHIGAN, }
July 25th, 1854. }

THE
PENINSULAR
JOURNAL OF MEDICINE
AND THE COLLATERAL SCIENCES.

VOL. II.

SEPTEMBER, 1854.

NO. III.

ORIGINAL COMMUNICATIONS.

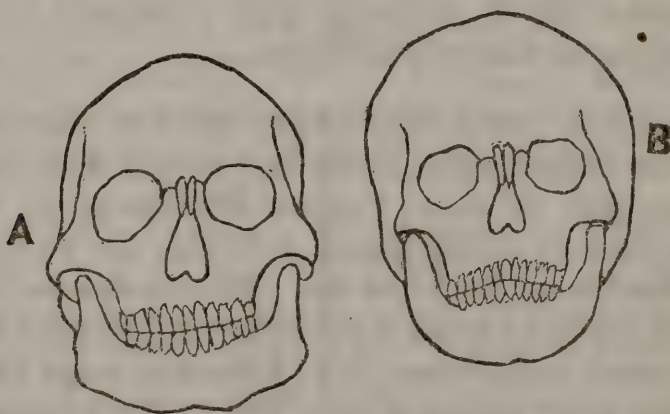
ART. I.—*Singular Analogies traceable in the Anatomy of the Varieties of Mankind.* By E. ANDREWS, M. D., Professor of Comparative Anatomy in the University of Michigan.

The object of the present article is not to detail new discoveries, but to set forth some analogies among facts already recorded more clearly than I have seen them elsewhere. The facts of course are old; the views founded on them are slightly glanced at by some late writers, but not distinctly stated in any that I have seen. However, there are one or two works which I have not by me at present for reference, and it is possible they may contain similar views. If so, I cheerfully resign all claim to priority, being merely desirous of doing what I can to promote true and philosophical views of human structure. At this time, when Comparative Human Anatomy is exciting so much attention and discussion, physicians are so often called upon to give decisions and facts respecting the anatomical variation of the races, that it really concerns the honor of the profession that they should have some clear and connected views to present as to what the anatomical distinctions of the races are.

The human species has been divided by writers into a number of races varying from three, to sixty-three. Without entering into the controversy upon what the true number is, I will simply, for the purposes of the present article, refer them to three great divisions according to the form of the cranium. First, those having broad skulls; second, those having elliptical, well-proportioned skulls, and third, those having narrow skulls.

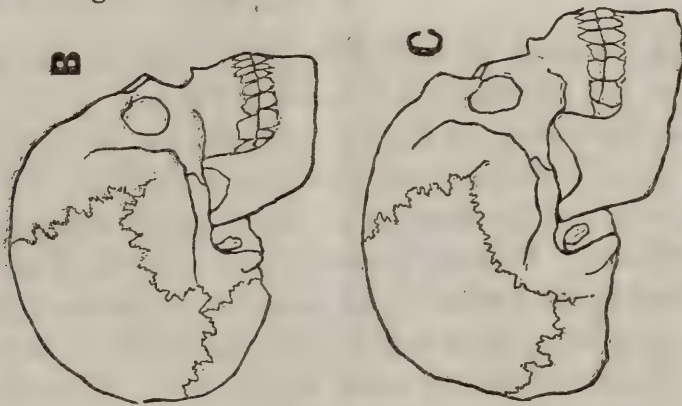
The races characterized by the broad skull, are those designated by Carpenter as having the "pyramidal skull," viz: the Chinese, Malayans, Tartars, American Indians, and Laplanders. In all these the malar bones are very massive and stand out laterally so far that two lines drawn from them upwards, touching the temples will meet above the head like the sides of a pyramid. Hence the term "pyramidal."

The word is unfortunate, however, as it expresses no general truth respecting the organization. The key to the structure of the Mongolian races is *the relative excess of lateral diameters over the antero-posterior*, and the key both to their physiology, and their habits of life is *the preponderance of development in the lateral organs over those which occupy the vicinity of the mesial line*. I will illustrate these propositions more at length after glancing at the other forms. Fig. 1, A, represents a front view of a Mongolian skull, showing the projection of the cheek bones, and the general massiveness of the lateral portions of the face.



The oval or elliptical skull belongs to the Caucasian race, comprising Europeans, and their descendants the Arabs, the Jews, the Bengalees of Hindustan, and the ancient Egyptians. It is marked by a symmetrical development in every direction, and a general elegance of outline. Most of this type have a somewhat greater capacity of the cranium than the other races, but this is not uniform. The Bengalees, the modern Fellahs

and the ancient Egyptians, according to Dr. Morton, measured a less crania, capacity than even the negroes; but whatever be the size of the cerebral cavity, the form of the skull is always after the same plan. It is marked by an oval smooth outline, and the absence of any marked deficiencies in length or breadth. Hence, results an elegance of contour, any approximation to which, according to Lieut. Col. Smith, is recognized as beauty by every race on the globe. Figs. 1 and 2, B.



The narrow skulls, or as they might be termed the *long* ones, belong to the negro groups, viz: the inhabitants of western Africa, of Australia, and New Guinea, together with the Hottentots and Bushmen. They are remarkable for their small lateral and great antero-posterior diameter. This gives a narrow cranium, as though it had been compressed laterally, while the facial bones are elongated and taper off to a sort of point or wedge shaped termination. The great length of the jaws gives that peculiar prominence to the negro mouth, as seen in the profile. Fig. 2. C represents a side view of a negro skull with the characteristics slightly exaggerated for the sake of illustration. The European skull B, is placed just above it for comparison. The greater length of C, is evident to any eye. This is what is called the *prognathous* form by writers. This term is objectionable, both because it is a horrible word to pronounce, and because it expresses no principle when it is pronounced. The term *prognathous*, simply refers to the projection of the jaws, whereas the distinguishing characters of the negro anatomy are shortness in the lateral, and great relative length in the antero-posterior diameters; and these are dependent upon the comparatively small development of the lateral organs of the whole body, and the preponderance of most of those parts which lie on or very near the mesial line, the opposite of what prevails in the broad skulled races.

Having thus enunciated these propositions I will now proceed to speak of the anatomy of these three races more in detail, and to show how their habits of life, and their physiological and mental peculiarities depend upon their structure. While I proceed, however, I wish to have it understood that I do not hold up these ideas as the *only* proper light in which to view the varieties of mankind. Other interesting relations present themselves from other points of view; at present, I am simply engaged with this one.

The races possessing the broad form of the skull, are the Mongolians, the Malayan, and the American groups of Dr. Morton, or in other words the Chinese, the Malays, the Tartars, the Lapps, and the American Indians. Of these the Chinese make some approximation to the elliptical or European form, and the Malayans are tinged slightly with some of the negro peculiarities. Probably the purest forms of the broad skulled race are found among the Tartars, the Lapps and the American Indians. Our proximity to the latter, gives us an excellent opportunity to compare them both with the elliptical and the narrow skulled races. *The races possessing the broad skull are remarkable for the greater development of the lateral parts and organs than of those about the mesial line.* This is manifest in the skeleton, and in the soft parts also. The occipital bone lacks the backward projection which it has in the Caucasian, and still more strongly in the negro. It is as it were, flattened, thus diminishing the antero-posterior diameter of the cranium. The nose is not at all remarkable for size, and in the Esquimaux is often so overbalanced by the lateral parts that a rule may be laid across from one fat cheek to the other, without touching it. The superior maxillæ are massive and powerful laterally, but not so much developed where they approach the mesial line; hence, the alveolar process has a wide, arching form, but the part which in quadrupeds is known as the intermaxillary bone, not being equally developed, the incisor teeth do not stand forward so far as in the negro, and from the general want of fulness on the mesial line, the aspect of the face is flatter than in the negro or white man. The bones of the pelvis follow a similar law. The lateral diameter of the brim is the greatest, and the ossa pubis instead of arching forward, and giving prominence to the mesial line as in the negro and white man, run directly towards each other, meeting almost in a straight line, and gives the brim a square form. In striking contrast with this, is the development of the lateral portions of the skeleton. The parietal bones stand out from each other, so that the lateral diameter of a Laplander's skull, according to the measurements

of Prof. Retzius is half an inch greater than the average of Europeans. The orbits are large and deep, and massively set, indicating the energy of life in the apparatus of vision. The cheek bones are heavy and very prominent, (see Fig. 1, A,) and the lateral portions of both jaws are very strong and widely arched, in striking contrast with the slender jaw of the Caucasian and the narrow pointed one of the negro. The structure of the soft parts is none the less marked.

The sense of taste which is situated on the mesial line, seems to exert but little power over them. They will often gorge themselves with an incredible amount of food, but it appears to be only when they either have just left, or are just to commence a long abstinence. They do not doat on the good taste of their food as the negro does when well fed, but on the contrary, rather despise hunger, when war or the chase calls them to endure it. Indeed the whole digestive system, which may be reckoned as belonging to the organs of the mesial line, seems to be only just sufficient for the purposes of their nutrition. It does not sway all the rest of the body by sympathy and the whole mind to minister to its gratifications as in the negro. Similar remarks may be made of the genital organs. They are smaller, and less developed than in the negro, and exert much less influence over their conduct and habits of life. The difference in this respect may be traced by comparing the amorous and domestic nature of our blacks, with the cold, sullen temperament of our Indians. The chief delight of the latter, is in the active exercise of their supple and perfect limbs, and in those mental excitements which naturally are connected with these exercises. They love war and the chase in which the success rests on strength of arm, keenness of eye, or swiftness of foot. For these things they will forsake home, domestic ties, and good food, and brave with delight, hunger and pain, and danger; and the imitations of these scenes constitutes their chief sports and games. In short the apparatus of locomotion is well developed, and seems to be the chief source of their pleasure. Such are the races which exhibit the lateral development in excess.

Let us now turn and take a brief survey of the Caucasian race, characterized by the oval form of skull. (Figs. 1 and 2, B.) From what has already been said, it will be readily inferred that this view of the subject favors Dr. Pritchard's idea, that mankind is not to be considered as a descending scale with the Caucasian race at the head, and the others arranged in a degenerating series at different distances below it, but

rather that our superiority consists in occupying the happy mean between the other races, and their inferiority consists not so much in the small quantity of development, as it does in the want of balance in it.

The capacity of the cranial cavity in this race, however, averages larger than in the narrow and broad types, but this is not uniform, for there are several Caucasian nations as the Bengalees and the ancient Egyptians whose cranial capacity falls below that of even the negro, according to Dr. Morton's measurements. The true Caucasian oval form persists notwithstanding. The lateral and antero-posterior diameters are in good proportion in the whole race. The occipital and parietal protuberances bear a medium proportion to each other, and the intermediate parts are plump and rounded. The bones of the face have neither the breadth of the Mongolian nor the length of the negro form. The malar bones are neither high nor low, making the face neither broad nor narrow. The nasal bones are of proportionate development, and the orbits neither large nor very small. The moderate sized lateral portions of the superior maxillæ are supported towards the mesial line by proportionate intermaxillaries so that the incisive portion of the alveolar arch is neither flattened nor prognathous, but handsomely curved. The bones of the pelvis follow the same law, which may be particularly observed in the ossa pubis; they being neither depressed as in the broad form, nor projecting as in the narrow; hence, it is equally removed from the square and from the oblong pelvis, presenting a medium and well curved brim.

The soft parts of the body present a similar justness of proportion between the mesial and lateral parts. The alæ of the nose are neither large nor small as compared with the cheeks, and the lips preserve a moderate roundness like the jaws. The apparatus of each of the special senses seems to be moderately acute and perfect, so that the gratification of neither of them can be brought forward as the characteristic passion of the race. The same is true of other parts. The digestive and reproductive systems do not predominate over the locomotive apparatus as in the negro, nor remain in relative inferiority as in the races that exhibit the lateral development. Other kinds of comparisons may be truthfully drawn, and other differences exhibited, showing the superiority of the Caucasian race over the others. I do not attack any of them, but in the mode of comparison, which we are now considering the superiority which most obviously presents itself is the perfect balance of development between the mesial and lateral organs.

The negro races present a marked contrast to the preceding. The cranial cavity is of about the same length as in the white man, and greater than in the Mongolian, according to Prof. Retzius' measurement, whilst its breadth is less than either; showing distinctly the predominance of the antero-posterior over the lateral diameters. The occipital bone is deeply concave and projects far back, and the anterior bones are elongated forward. This elongation makes a greater distance between the posterior part of the temporal and superior maxillary bones; hence the zygomatic arch is not high as in the Laplander, the central Asiatics and American races, but long and narrow. The orbits have not the massive squareness of the Indian, but are oval, much like the Caucasian type. The most marked feature is usually considered to be the projection of the jaws, (Fig. 2 C.) but it is doubtful whether their elongation is really much greater than that of the cranium, for the mechanical form of the skull is such that not only is a given elongation more readily noticed by the eye in this position than in most others; but the advanced position of the maxillary profile, is the result of the combined elongation of the facial bones themselves and of the cranial bones upon which they stand. This is further proved by the fact that the lower maxilla which articulates opposite the center of the skull, and consequently receives no assistance from the elongation of the cranium, seems to be relatively too short; the lower incisors lean forward to reach the upper, and the chin has that receding look which has been generally considered an approximation to the profile of the chimpanzee and the orang. That this is not due to the absolute shortness of the chin may be proved by measurement.

If the inferior maxillæ of each of the three types be placed upon a horizontal plane with the condyles all in the same line, it will be seen that the symphysis mentis of the negro extends farther forward than either the Mongolian or the Caucasian. Measurements which I took in this manner, resulted as follows:

Distance horizontally from a point even with the condyles to the front surface of the symphysis mentis in the Caucasian, four inches and two lines; in the Indian, four inches and three lines; in the negro, four inches and six lines. This shows that the chin of the negro, so far from being an exception to the general developement of the median portions of the skull actually projects forward by measurement more than in the Caucasian, and that the location of the articulation of the maxilla where it is

not all moved forward by the elongation of the cranial bones, is what causes it to fall short of the projection of the upper jaw. This produces a teleological necessity that the incisors should incline forwards to meet their fellows, and this, with the thickness of the lips produces the fictitious appearance of a small developement of the chin. The nasal bones of the negro project in a sharp ridge, notwithstanding the flatness of the alar cartilages. The lateral portions of the superior maxillæ are feebly developed, showing none of that broad flat surface which Mongolian skulls display beneath the orbit, but the intermaxillaries project boldly forward, giving great prominence to the incisor teeth and a sharp elliptical termination to the front of the alveolar arch. Both jaws are long and narrow, so that one who first observes the apparent bulkiness of a negro face as seen in profile, is surprised to find so slender and tapering a muzzle in the front view. The pelvis presents a figure analagous to that of the cranium. It is narrow, and the pubic bones being more developed than the iliac, the symphysis projects boldly forward, enlarging the antero posterior diameter, diminishing the lateral and giving the characteristic form of the brim, which some writers have called oblong. The proportion of the soft parts is still more striking. The nose is broad and massive, and though the soft portion appears flattened, it is large and projects down over the upper lip. The lips are very thick and projecting, and the organs of taste are developed into such perfection as to render the negro proverbially a lover of good cheer; indeed the completeness of his digestive apparatus is in striking contrast with the ill-shaped locomotive organs. The vocal organs are well developed if we may judge by their fondness of exercising them both in speaking and singing. The external genital organs also are very large and sensitive, and form a marked characteristic of the race.

In the female, the vagina and labia are large, and among the Hottentot females, the labia minora often are so developed as to project externally and to have the appearance of some superadded organ. Cruveilhier, is in error, however, when he gives this as characteristic of all the Hottentot women. According to the best observers, it is about as frequent among them, as corpulency among us. Still the fact is of value as showing the tendency to excessive developement along the mesial line of the body. If now we turn to the lateral organs of the body we find a marked inferiority. I am not aware that the sight or hearing have anything more than ordinary acuteness. The lungs are feeble compared

with the powerful respiratory apparatus of Mongolians, Lapps and Americans; the arms are ungainly, the legs bowed and ill-formed, and the feet flat and misshapen.

The reader who has had patience to follow this dry detail thus far, will now readily be able to see at a glance, almost the whole philosophy of the peculiarities of mind and of habits of life in the varieties of mankind, so far as they depend on physical conformation.

It must be here remarked that but few nations can be found exhibiting the type of their race in perfection. Thus in Africa, after leaving the South-west coast and travelling North-east, we come to lighter colored, straighter haired tribes, losing the negro type until it seems questionable in some cases whether they ought not to be reckoned with the dark part of the Caucasians.

So with the races having the broad skull. The Chinese constitute the majority of their entire number, but the Chinese skull partakes considerably of the elliptical type, so that many individuals among them it is said possess crania that might easily pass for European. Not wishing to touch at all the great dispute of the origin of races, nor to complicate the present article with a full examination of every nation in the world. I propose to select the negro as found in Guinea and America as a sample of the narrow type, the Europeans as specimens of the elliptical, and the American Indians for the broad skulls. The latter are not the most characteristic race of that division, but still the peculiarities of the skull are distinctly marked, and their proximity to us and our acquaintance with their habits renders them eligible as samples, when habits of life are to be discussed.

First, then the Mongol race, with the American Indian for a sample. It will be recollected that we found this type to be distinguished by a relative excess of development of the lateral organs of the body over those of the region of the mesial line.

Now, if external circumstances permit, a nation will generally adopt such habits of life as gratify their predominant tastes, and in physical things those tastes are predominant which call into exercise the organs having the greatest development. The American Indian from the moderate development of the sense of taste, cares but little for the pleasures of luxurious food. Like other savages, it is true, he will on many occasions gorge himself with enormous quantities, but it is with little regard to quality or taste. The gustatory sense holds no dominion over

him, and when his love of war or of roaming comes in play, he endures hunger to the greatest extent without being subdued or deterred by it from his aim. The digestive system being in a subordinate degree of development, does not hold that powerful sympathetic influence over him that it does in the negro, and the idea of toiling to maintain a regular home in which he may enjoy a constant and abundant supply of rich and palatable food, enters into no part of his road to happiness.

A similar inferiority of influence is observable in the sexual functions. The organs being comparatively small and less developed than in the negro, sexuality is a less powerful instinct; hence the fact that even in the wildness of their plundering excursions, the violation of females seems to be a less prominent accompaniment than happens when undisciplined rabbles of other races are let loose in war; hence also the indiscriminate manner in which they slaughter alike men under arms and women shrieking for mercy, having apparently little of that instinct which teaches other races to regard it as unnatural and unmanly to kill a defenseless woman. For the want of a taste for the humanizing tendencies of domestic ties, of woman's influence, and of home comforts; they turn exclusively, and with a kind of idolatry to the indulgences of the bolder and fiercer parts of their mental nature, and to the exercise of the bodily organs which they possess in a greater perfection than others, viz: the eye, the ear, their capacious lungs, and their supple and sinewy limbs.—Poets may weave fine stories about the affection of the "poor Indian" for his wife and children and his cabin under the green-wood tree, but it is all Caucasian poesy stalking in Mongol moccasins. The Indian sees nothing in the whole establishment but a squaw to hoe his corn, take care of his papooses, and carry his packs when he travels, and a wigwam to keep the rain off when he sleeps, and serve as a convenient place to stay until the next war or hunting excursion. His true enjoyment is in those manly pursuits, where his keen eye is searching the dry leaves for the traces of footsteps which none else can see, or his ear listening for sounds which others cannot hear, and he is exercising his courage, and cunning, and his active limbs in pursuit or retreat. These are the occasions when his true character shines out, and the only pursuits which possess for him any charm, because they are the only ones which bring into exercise the best developed organs of his body with the instincts and emotions depending on them.

This accounts for the irreclaimable tenacity with which the Indians cling to savage life.

From the feeble development of the organs of the mesial line and the instincts depending on them, they receive little pleasure from good food, comfortable homes and domestic ties, hence they find no stimulus sufficient to induce them to undergo toil and weariness for what brings them no enjoyment. As long as war and the chase are attainable, therefore they will prefer them to civilization, and when they are deprived of these pursuits they become lazy, worthless vagabonds, without manhood or energy. They seek in alcoholic stimuli a substitute for the lost excitements of their former life, and being thus demoralized, the energies of mind and body both decay and the race becomes distinct. The same qualities prevent the possibility of successfully using the Indians as slaves. To be capable of profitable servitude, a people must be capable of attachment to the hand that feeds and protects them, and of feeling some interest in the kind of employments to which they are destined.

The Indian cares not a fig for the home you offer him; he will eat the food you give him as the lion does in the menagerie, and thanks you as little for it. It is all very well, but he would enjoy much better to chase you a week without food, and bring you down with his rifle at last, than to work for you and eat your costliest viands as pay. Your civilization is a stupendous humbug, which neither interests him or excites him. If he cannot recover his freedom, he sinks into a sullen apathy, and in a few generations the race dies out.

After what has been said, it will readily appear to all, that the peculiar excellence of the Caucasian character, is in the symmetrical development of all its traits. Nothing is wanting, nothing is in excess. In short the elliptical cranium indicates a race that seeks its happiness in a well balanced exercise of all powers.

The negro is the exact opposite of the races having the lateral development. From the inferiority of the lateral organs, the eye, the lungs, and the locomotive apparatus, he cares little for the excitements of a daring rover's life, and sees no use in seeking perilous adventures where there is nothing to be gained, but the pleasure of getting out of them by toil and pain and hardship. On the other hand the organs about the mesial line, and the mental qualities connected with them, modify his whole character. The negro is a natural epicure in his way. He eats his food with a keen relish and enjoyment of the *luxury* of eating good things, and from the power of the sexual instinct, he is as capable as the white man of all the emotions of gallantry, connubial affection, etc.,

which are connected with that passion. These being his chief enjoyments, he pretty readily contents himself with even a state of bondage, provided he can be well fed, and have his woman and his cabin. He also easily forms an attachment to his master from whom he receives these things.

We see, therefore, in the anatomical constitution of the races, a reason why the Indian can with difficulty be civilized or enslaved and why the negro readily accommodates himself to both conditions. The future can be easily divined from the same point of view. The Mongolian is to be civilized only by seizing upon the leading traits of his character and giving him energetic activity in some direction that will lead slowly but steadily towards civilization. The first step in his improvement *must be some stirring employment*, that will at the same time excite him and restrict him to a settled residence. He will thus accumulate wealth and comforts, gradually learn to love and appreciate them, and thus by degrees develop the dormant parts of their character. Hence whenever Mongolians have been civilized it has been as conquerers and not as slaves.

Striking instances of this truth may be seen in the Magyars of Hungary and in the Turks. Originally they were Tartars from central Asia. In obedience to the fierce instincts of the Mongol nature, they rushed down upon Europe, conquered themselves a new territory richer than their own, and settled upon it, retaining the Caucasian population as the working class. The frequent wars, and the energy required to defend and govern their new possessions, gave them the requisite stimuli to continued exercise of their powers, and in the meantime the civilizing tendencies of a fixed home, gradually transformed the rude Mongol into polished Magyar and the grave Turk.

It is curious to observe that the possession of slaves, which usually degrades both owner and bondmen, has had the contrary effect among the Cherokees. The owning of slave property by this tribe has necessarily attached them to the soil, and thus by giving them a fixed residence and at the same time occupying their energies in the care of it, has without doubt helped on their civilization. The future of the Mongolian race then, is probably this. Wherever they can meet civilization as the conquering race, they may embrace it by degrees and become permanent nations, but wherever they meet it on a footing of inferiority, they will die out and be lost, long before the good influences of it can be made efficient upon them.

The negro nations on the other hand do not become extinct by being enslaved. It is probable that the first effect of slavery, by depriving them of their wild freedom, is to degrade their minds and extinguish any natural love of liberty which they may possess. It is worthy of note in this connection, that Dr. Morton found the cranial capacity of American born negroes to be less than that of those who were natives of Africa. But there is a slow secondary cause at work in the opposite direction. The negroes are employed in physical labor, that gradually must develop their limbs, and train the dormant parts of their intellects to a new kind of action. It is a significant fact that though the development of the mesial line is what renders the negro constitutionally submissive under slavery, yet, the services which are required of him, tend to develop the lateral organs; hence the probability is that he will in the process of time, attain a modification of his character, which will render it easier to retain him as a free laborer than as a slave. That which now makes him valuable as a bondman, is not so much his want of intellect, as his submissive and quiet temperament.

I have been thus free in tracing out this line of reasoning beyond what seems at first thought to be strictly professional, because I consider it the duty of medical men to track out the remotest consequences of physical organization, and to qualify themselves to predict to the world the good and evil which it will reap from its various physical employments and habits. I have written these thoughts in haste, under the pressure of other engagements, and crave the readers indulgence for the want of arrangement visible in it. Other divisions of the races, may with truth be made, and other grounds of difference shown, I deny none of these; my object is to call attention to this three-fold distinction in human anatomy, and to show that it has its influence upon character, without excluding other influences, either moral or physical. If I have awakened attention to this point it is enough.

ART. II.—*Circular to the Physicians of Michigan and the Adjoining States.*

At the last meeting of the Peninsular State Medical Society, the following Resolution was passed:

Resolved, That the Society shall be a "Committee of the Whole" on Epidemics, and each member is hereby requested to keep a record of

such epidemics as may prevail under his immediate observation, carefully noting their special peculiarities and treatment, and annually transmit an abstract of his observations to the President of the Medical Faculty of the University of Michigan, in season for said Faculty to condense the information thus obtained, giving each practitioner credit for details furnished, and to present the same, in the form of a Report to the Society, at each annual meeting, and that to ensure the response of the profession, the Faculty be requested to send a circular to various parts of the State, asking information on epidemic and endemic diseases, and the success of the treatments instituted.

Resolved, That a Committee be appointed to wait upon the members of the Medical Faculty of the University, and report whether said Faculty will perform the duty requested of them by the above Resolution.

In accordance with this Resolution, the members of the University Faculty present at the meeting were waited upon by a committee, and at their request, consented to undertake the duty referred to. Accordingly they take this opportunity to call the attention of physicians to the subject. They would respectfully request all physicians, both members of the Society and others, in this or the adjoining States, to return answers to the following questions:

1. What epidemics have come under your observation during the years 1851-'52-'53 and '54?
2. When did they commence, and how long did they continue?
3. In what place did they prevail? and how widely were they extended?
4. What was the weather before they commenced, during their progress, and at the close? (State particularly respecting humidity and heat.)
5. What were the symptoms and course of the disease? (Please describe carefully, and illustrate by cases.)
6. What modes of treatment were adopted and what success attended each?
7. What was the percentage of mortality as near as can be estimated?
8. Did the epidemic which you describe, break out in a healthy community, or was it preceded by some other prevailing disease?
9. When it subsided did it simply grow milder and disappear, leaving the community healthy? or did it merge into some other complaint?
10. What is the face of the country, the climate, the character of the

water, and the condition as to forests, clearing, and density of population in the region where the disease prevailed?

11. Were all persons indiscriminately attacked? or was there a difference observed in the liability of foreigners (state the nation) or natives, children or adults, males or females, or between the races whites, blacks, and Indians?

12. Please detail any other interesting circumstances which may have been observed, if calculated to throw light on the subject.

13. Was there any evidence of the contagious character of cholera where it prevailed.

14. Was there any connection observed between the kind of water used for drink and the prevalence of cholera? also how much was to be attributed to filthy living and imprudence in eating.

15. Of ordinary diseases not epidemic, what prevail most in your region and what least.

16. What information can you give respecting the effect of climates soil, cleaning up forests, etc., upon them?

17. What variations in kind or frequency, do you observe in them, among the different races of whites Indians, and negroes.

18. During your residence at or near your present location, have you observed from year to year any gradual tendency among all diseases, to change their type, so as to be now either more typhoid or more sthenic than formerly, or to require more tonic or more depletory treatment?

Physicians from every part of the north west are earnestly requested to send information on all or any part of the subjects alluded to in these inquiries.

In making up the final report to the State Society, due credit will be given to each person furnishing information. It is important that the answers be sent by the 1st of January next. Address Prof. A. Sager, Ann Arbor Michigan.

ART.—III. *Cholera in Ann Arbor.*

The cholera in this place has not been sufficiently severe to be worthy of a minute description. The first cases were four emigrants left there from a train of third class cars about the last of June. Being taken sick on the way, they were put off at Ann Arbor, placed in suitable quarters as

soon as possible, and good medical attendance furnished. Three of the four died. About the same time, an Irishman, keeper of a grocery, was attacked and died. He had just returned from a journey to New York, on which he had suffered much from fear of the disease. A number of persons were subsequently attacked with the premonitory diarrhœa, and some with vomiting, cramps, etc., but by prompt and timely care recovered before reaching the collapsed stage.

Persons residing in the place, so far as I observed, seemed when thus attacked, to be easily restored by prompt treatment; the symptoms having none of the obstinate malignancy of true Asiatic Cholera, but those who had been traveling, seemed, either from neglect in the early stages, or else from a difference in the nature of the disease, to be much less amenable to treatment.

A gentleman who had been residing in Chicago was attacked soon after his arrival here, and died in the usual manner. Subsequently, a young lady from Ohio, who had been visiting in Chicago, being troubled with the ordinary premonitory symptoms, left that place and came to Ann Arbor for safety. When she arrived here her diarrhœa had been continuing for more than a week, but as it seemed mild, she merely took something intended to restrain it, but sent for no physician. In about 24 hours after her arrival, she was taken with violent symptoms, and died in ten hours.

A German woman, pregnant, and in feeble health, was also attacked and died. Several German and Irish children who had been indulging in large quantities of green fruit, were also attacked and died with choleroid symptoms. Some other deaths were reported to be of cholera, but turned out on investigation to be from other diseases.

The total number of deaths from cholera, or disease closely resembling it, was about eleven. Of these, six were of emigrants, and others who had been traveling. Four were produced by eating unripe fruit, and one from cause unascertained. About seven were foreigners, and four Americans.

At the present time, (Aug. 10,) there are no more cases, and the visitation seems to be over.

Ann Arbor, Aug. 10, 1854.

X.

ART. IV.—Case of Softening of the Brain. Autopsy.

Z. W——, a young man pursuing a somewhat sedentary life, of mixed temperament, and regular habits, was troubled for a long period with pain in the back of the head and neck. As he was not constantly under any one's care professionally, I have no means of ascertaining with accuracy all his symptoms. As nearly as I can ascertain, there were symptoms of gastric irritability to a considerable extent, such as vomiting, headache, &c. There was a gradual loss of health for many months, during which time he tried almost every kind of treatment, but adhered steadily to none. Whether this changability was the result of mental disturbance and loss of force of thought, occasioned by the disease in the head, or was in consequence of unsettled opinions on medical subjects, I do not know; be this as it may, he was seen and prescribed for at different times by two regular Physicians, by one or two Homœopaths and by a Thompsonian. During the last few weeks of his life he had no medical adviser of any kind.

As the disease progressed, there supervened deafness of the left ear, and some disturbance of the nerves of the left side of the face. Various other troubles ensued of which I could get no perfect account, from the fact that he had no professional adviser, and finally he expired.

At the autopsy, attention was first turned to the abdominal viscera on account of the disturbances that they had seemed to undergo. The skin of the abdomen was natural and underlaid with a moderate layer of adipose tissue. The peritonœum was smooth, moist and healthy. The stomach and bowels exhibited no evidence of disease whatever, the only discolored portions being those changed by hypostatic congestion after death. The heart and lungs also proved perfectly healthy. The head was next examined, for which purpose the calvarium was removed. The scalp was found unusually vascular and gorged with liquid blood; the duramater was pretty strongly adherent to the calvarium, and the arachnoid membrane spotted with patches of coagulated lymph. The veins of the pia mater were more gorged than usual, and the puncta vasculosa of the substance of the brain somewhat distinct but not very unusually so. On removing the dura mater with the scissors, about a tea cup full of serum burst suddenly out of a rent in the posterior lobe of the cerebrum. On tracing the rent forward, it led to the left lateral ventricle. The right one communicated with it, the septum lucidum being

pretty much destroyed, or at least on cautiously searching for it, only the merest remnants could be discovered, possibly it was broken after death by the pressure of fluid from the right ventricle at the moment the effusion in the left was so suddenly evacuated. On raising the floor of the lateral ventricles, the third ventricle was found distended with fluid, and the *iter e tertio ad quantum ventriculum* was as large a pipe stem. The cerebrum was now removed entirely down to the isthmus. On raising the cerebellum from its bed, the posterior part of both lobes, the left especially, was found disorganized by grey softening. About one quarter of the organ was reduced to a gray watery pulp: the fourth ventricle was distended with serum, which communicated with the contents of the third ventricle through the enlarged *iter e tertio*.

In considering this case, I was struck with the ambiguity of symptoms which proceed from disease in the brain. In this case the sympathetic affection of the stomach and bowels had been altogether more marked than the direct head symptoms, so far as I could learn them. Again—what an ambiguity as to the seat of disease in the brain, as indicated by paralysis in the distant portions of the body. Here an effusion may go on in the fourth ventricle, it passes the *iter e tertio* into the third ventricle, and if the observations of some anatomists be correct, will easily find a free road into the fifth and the lateral ventricles. In all this long and tortuous range of chambers, who shall say what organ will first be paralyzed by the pressure of the fluid if it falls short of fatal coma, or if the effusion is perverted as well as excessive and becomes acrid or irritating, as would be the case in erysipelas; who shall predict what portion of the cerebral substance which is bathed by it, will first feel its influence. It is obvious that from the anatomy of the brain the effects of effusion in or around it may be spent upon portions quite distant from the seat of most active disease, and that in case where blindness, or paralysis of some portion of the muscular system occurs before death; the observation of the position of the inflamed part in the autopsy will not settle the question of its position in any other case that may present the same paralysis. Other sources of error, from the fact that effusion tends to remove evidence of congestion are also to be considered, and are duly dwelt upon by writers, but I do not think the source of error which I have mentioned is sufficiently considered by those who examine these difficult cases. X.

SELECTIONS.

From the American Monthly.

Remarks on Croup and its Treatment. By HORACE GREEN, M. D.

The extent of the fatal cases of croup which have occurred among children, in the city of New York, during the last year, is almost without a parallel in the history of this affection.

The whole number of the fatal cases of this disease which, according to a statement furnished by the City Inspector, occurred in New York during the year ending February 28th, 1854, was *six hundred and eighty!* The subjoined table contains a statement of the number of deaths from croup in each of the months of the above-mentioned year; and, also, columns to exhibit the relative proportion of males and females out of the six hundred and eighty fatal cases.

	Males.	Females.	Total.		Males.	Females.	Total.
1853. March,	34	36	70	1853. October,	38	43	81
“ April,	29	26	55	“ Nov.,	31	39	70
“ May,	27	22	49	“ Dec.,	47	42	89
“ June,	28	14	42	1854. January,	28	39	67
“ July,	13	15	28	“ February	33	28	61
“ August,	21	11	32				
“ Sept.	15	21	36		344	336	680

Undoubtedly, this disease, like many others, is influenced by atmospheric peculiarities, so as to assume, occasionally, an epidemic character, and, in certain seasons, to exhibit a great increase in its prevalence. As the various forms of angina have been more or less aggravated during the past season, it is not improbable that atmospheric peculiarities have also served to increase the frequency of croup.

We have no means of comparing the preceding statement of the fatal cases of croup, with the statistics of deaths from this disease in other places during the same time; but, on referring to an article published in

the London Medical Gazette for 1850* on the subject of croup, we find that, in a population nearly fourfold greater than that of this city,† the average number of deaths from croup, during a period of eight years, in London, was less than three hundred and eighty a year. The number of deaths from croup in the whole State of Massachusetts, in 1851, according to the Registration Report for that year, in a population, at that time, of about one million,‡ amounted to four hundred and eleven. During the same year, in Suffolk county (which county includes Boston, Chelsea, &c.,) with a population amounting to 145,000, the deaths were ninety-two.

It will be recollected, that at the census of 1850, the population of Kentucky was very near the same in amount with that of Massachusetts.¶

It is a little remarkable, diverse as are the climates of these States, that with a population nearly equal, the number of fatal cases of croup should be uniform. In 1852, according to the annual Report of the Registration of births, marriages and deaths in Kentucky, for the above year, the deaths from croup were four hundred and sixty-one; just fifty more than occurred in Massachusetts during 1851.

In Philadelphia, the mortality from croup, in the five years preceding 1846, was seven hundred and fifty-six; or an average of one hundred and fifty-one a year,§ in a population which, at the census in 1850, amounted to 121,376.

These brief statistics will afford us some idea of the ordinary annual mortality from croup in some of the larger cities, and in different climates, and will exhibit, also, especially in comparison with London, the frightful mortality caused by the disease in New York during the last year.

It is now fifty years since Napoleon issued, from the head quarters of Finkenstin, his celebrated general order—"d'ouvrir un concours sur la maladie connue sous le nom de croup," and offered a prize for the best essay on the nature of this disease, which served to awaken a new interest on the subject throughout the whole of Europe; and was the occasion of eliciting many learned, elaborate, and highly interesting works on the nature and treatment of this terrible malady. From that time to the present, these inquiries have been pursued, in this country and in Europe, by eminent medical men, and the results published to the world; but, has a plan of treatment yet been discovered, recommended, and adopted generally, that has had the effect to abate the severity of the disease, or, in any considerable degree, to lessen its fatality?

In that excellent treatise on croup, by Dr. John Ware, of Boston, the

* London Medical Gazette, vol. x., p. 542.

† The number of the inhabitants of London, at the last census, was 2,632,236. In New York, in 1850, it was 515,547.

‡ At the census in 1850, the population of Massachusetts was 994,514. That of Boston proper, 136,881.

¶ The population of Kentucky was 985,405.

§ Dr. Meigs on the Diseases of Children, p. 84.

author declares, that "the received mode of treating the disease," which is very much the same for all varieties, "has come down to us by a sort of tradition from our predecessors in the profession, and varies but little, if at all, from that which was originally adopted when the disease first became the object of attention. * * * In the main, emetics and bleeding, blisters and calomel, have been the principal remedies. The depleting, reducing, and perturbing method is that upon which dependence has been chiefly placed."*

This is, indeed, true, for it must be admitted that, whilst in the management of many other diseases great improvements have been made during the last half century, in the traditionary treatment of this affection no modifications have been generally adopted which have served to diminish, in any amount, the number of fatal cases. On the contrary, the disease is admitted by the best and most recent authorities, to be not only progressively on the increase, but, so far uncontrolled by the ordinary therapeutic measures, as to prove fatal in nearly one half of the whole number of those who are the subjects of this affection.†

These unfortunate results, which, in the statistical records of croup, have followed the ordinary mode of treatment, will be found to have been in no degree more favorable in the history of the disease as it has occurred in our city during the past winter; and we do not hesitate to avow our firm conviction, that the employment of the reducing and perturbing plan of treatment, a plan recently recommended by more than one eminent writer, and still employed by many practitioners, has destroyed more lives, among young children, altogether, than it has been instrumental in saving. A work, by an eminent English writer, has recently been republished in this country, which has met with a very favorable reception from the profession generally, and has received the commendation of the reviewers, in our medical journals; and yet, the method urged by the author, in his "*Lectures on the Diseases of Infancy and Childhood*,"‡ as the appropriate plan for the management of membranous croup, if fully carried out in the treatment of the disease, would prove fatal in its results, as we conscientiously believe it has done, in more instances than it has proved remedial. That we may not be misunderstood in our remarks on this heroic plan of treatment recommended by Dr. West, and employed to a great extent, by many practitioners in this country, we shall take the liberty of giving a brief statement of the therapeutic measures by him adopted.

In cases where an attack of croup "is merely apprehended, but where catarrh exists, attended with a slight, ringing cough," Dr. West recommends that the child "be confined to the bed-room, be placed on a spare diet, and should take an emetic of ipecacaunha and antimony, to be fol-

* Boston Medical and Surgical Journal, vol. xlii., p. 261.

† Traite du Croup, par M Double, p. 479.

‡ Treatise on the Diseases of Children, by Chas. West, M. D.

lowed by some mild diaphoretic medicine containing small doses of antimonial wine.*

But, should the disease have attained its full development before the patient comes under the notice of the physician; or, should its access be violent, a far more energetic plan of treatment is advised by Dr. West. "The abstraction of blood, and the administration of tartar emetic, are the two measures on which your main reliance must be placed; and you must bleed largely, and give tartar emetic freely, remembering that if relief do not come soon it will not come at all — that there is not danger only, but death in delay. I have never met with an exception to the rule which prescribes the free abstraction of blood in every case of severe idiopathic croup, when seen at an early period, and before the purple lips, and livid countenance, and failing pulse, announce the long continuance of a serious obstacle to the free admission of air into the lungs. Even in very young children local depletion forms, in these cases, but a poor substitute for general bleeding; for it is not merely the abstraction of a certain quantity of blood that is needed, but its removal in such a manner as most speedily to produce an effect on the system. Bleeding from the jugular vein is preferable, under these circumstances to venesection in the arm, since the latter often fails in children under three years old; and the blood never flows so freely as when taken from the jugular vein."†

After bleeding "largely" from the arm, or, what Dr. West considers preferable, "in very young children," from the jugular vein, *because*, in children under three years of age, "the blood flows more freely when taken from the jugular vein," — the free administration of tartar emetic is recommended. To accomplish any real good by means of this medicine, "it must be given," says Dr. West, "in doses of an eighth, a quarter, or half a grain, every ten minutes, until vomiting is produced; and the same doses should afterwards be continued every half hour, until decided and permanent relief has been afforded." If the medicine, when administered in the same amount as at first, fails after a little to excite vomiting, it is advised by the author to increase the dose until this effect is fully produced. The antimony thus administered is to be continued for four or six hours, when, if "no satisfactory measure of improvement should have yet appeared, local depletion may be resorted to, or possibly a repetition of general bleeding may in some cases be ventured on."‡

Later in the disease, calomel, in combination with ipecacuanha, is administered every hour or two hours, "but interrupting its use at intervals in order to give an antimonial emetic;" and, finally, these active therapeutical measures above enumerated having been thoroughly tried, and tried in vain, Dr. W. advises that a totally different plan of treatment be at once adopted. "If antimony cease to vomit," he remarks, "or if it be rejected immediately, and without effort, the fluid thrown up being unmixed with phlegm or false membrane, while the temperature sinks,

* Diseases of Infancy and Childhood, by Chas. West, M. D., 221, Philadelphia edition.

† Ut. supra, p. 221.

‡ Op. citat, p. 222.

the lips grow more livid, the pulse more frequent and feeble, and the paroxysms of dyspnoea are undiminished in severity; or, if the respiration, though less laborious, be attended with a sibilant, instead of a stridulous sound, it is evident that by continuing the medicine we may destroy the patient, but shall fail to cure the disease."

Under such circumstances, "an attempt must be made to arouse the child from the state of collapse into which it is sinking, by placing it for a few minutes in a hot mustard bath, and emetics of the sulphate of copper should at once be administered."* If, to the therapeutic measures already enumerated, we add that of the use of mercury, which, in addition to its occasional administration at an earlier period, is to be employed at that stage of the disease when the patient "seems sinking into a state of collapse," and under these circumstances to be fully employed, by means of its internal administration, every hour, "while at the same time a drachm of strong mercurial ointment may be rubbed into the thighs every two hours," in order to bring the system as speedily as possible under the influence of mercury," together with the application of "a blister to the throat"—if these measures are included, we repeat, they constitute the plan of treatment strongly advocated by Dr. West, and employed by many practitioners both in Europe and in this country, for the treatment of membranous croup. "Emetics and bleeding, calomel and blisters," *Medicina agens et perturbans*, the Sangrado, traditionary treatment of the last half-century! We can hardly imagine a plan more likely to prove unsuccessful, when fully carried out, than the method of which we have spoken; and if we consult the records of this plan, we shall find that, where it has been adopted, this opinion of its effects will be entirely sustained by the results which have followed its employment.

A similar method, though in some degree less heroic, is advocated by Dr. Meigs, of Philadelphia, in his recent work on "The Diseases of Children."† In a "summary of the treatment," Dr. Meigs suggests "the following plan of treatment, to be pursued in children about or over two years old, when we are called in good time; to take from the arm three or four ounces of blood, once, twice, or three times in two days, according to the strength of the child, and the degree and obstinacy of the fever. In both forms of the disease, emetics, and I would recommend alum in preference to any other, should be given once at least, very often twice, and, in violent cases, three or four times in the twenty-four hours, so as to produce vomiting attended with a good deal of effort. To give, at the same time, from one to two grains of calomel, with a quarter or half a grain of Dover's powder, every two hours, taking care not to give a dose for an hour before nor after the time selected for the exhibition of the emetic. In cases in which there is loud stridulous respiration, heard both in the inspiration and expiration, in which previous treatment has had no effect, and in which there is threatening of speedy death, we may give two grains of calomel every hour until three or four doses have been

* Op. citat, p. 224.

† A Practical Treatise on the diseases of Children. By J. Forsyth Meigs, M.D., &c., second edition.

taken, and direct the exhibition of an alum emetic after the last dose, or resort to tracheotomy.*

Certainly, in one respect, this "plan of treatment" is characterized by a great improvement on the wholly reducing and prostrating method ordinarily adopted;—namely, in substituting alum for antimony as the emetic in the treatment of the disease. His reasons for this are as follows: "Antimony, when resorted to as frequently in the disease as I am of the opinion emetics ought to be, is too violent in its action; it prostrates many children to a dangerous degree, and is, I fear, in some cases, itself one cause of death."†

If, then, these positions, with regard to the generally-adopted, reducing plan of treating croup, are tenable—and in confirmation of these views we challenge inquiry into its history—is it not time for the thinking, *progressive* portion of the profession to conclude with Dr. Ware, "that the methods of treating this disease in common use require a careful reconsideration?"

That there is a method of treating croup, which every practitioner may, if he will, adopt, and which, if promptly and appropriately employed, will arrest the disease in a very large proportion of cases, we unhesitatingly aver.

In 1848, the writer published a small treatise, "On the Pathology of Croup, and its Treatment by Topical Medications," in which the declaration was made that, "the practice of making topical application of medicinal agents into the larynges of young children, for the treatment of membranous croup, is a plan entirely practicable, safe, and, when judiciously employed, *in the highest degree efficacious*." This method of treating a disease hitherto so unmanageable was founded upon the following propositions, which were then advanced, with regard to the pathology of the disease, namely: That the essential characteristics of true croup "consist in an inflammation of the secreting surfaces of the fauces, larynx, and trachea, which is always productive of a membranaceous or an albuminous exudation.

2. "That the membranaceous concretion, which is found coating the inflamed mucous surface of the parts in croup, is an exudation—not from the membrane itself, but is secreted by the muciferous glands, which so abundantly stud the larynx and trachea.

3. "That the exudative inflammation commences, invariably, in the superior portion of the respiratory passages, and extends from above downwards—never in the opposite direction."

Since the publication of the work in which this mode of treatment is advocated, the author has had the opportunity of treating many cases of croup on the plan deduced from this view of its pathology; viz: by means of topical medication—not only in his own practice, but in the practice of, and in conjunction with, other members of the medical profession; and with an amount of success that has afforded a high degree of encouragement and satisfaction.

* Op. citat, p 103.

† Op citat. p 97.

He has also received from medical men, in different parts of the United States, as well as from numbers in Europe, the history of many cases of membranous croup, wherein topical measures, in their hands, have proved effectual in arresting the disease. In view of the great fatality, on the one hand, which constantly attends this disease, as ordinarily treated, and on the other, of the prejudice against the local treatment, which is still entertained by many, especially of the older members of the profession, the author does not feel at liberty to withhold from his professional brethren this abundant and most conclusive testimony in favor of topical medication in the treatment of croup.

It will not avail, for the cavilling opposer of this method of treating the disease, to rebut all testimony in its favor, as many in the profession, who, having always refused to try the plan, have persisted in doing,* with the assertion, that the cases of croup which have recovered rapidly under local treatment "were not cases of true membranous croup, but those of a spasmodic, or catarrhal nature, such as would have recovered under almost any treatment;" for, in many instances the employment of nitrate of silver, in the treatment of croup, has been adopted with great success, by eminent practitioners, who had, previously, had extensive experience in the management of the disease, but who, before the employment of topical medication, had treated unsuccessfully, a large number of cases by the ordinary "depressing, depleting, and disturbing remedies." This was the case, as with many others to whom we could refer, with the distinguished Dr. John Ware, of Boston, to whose experience, in the different modes of treating this disease, and the conclusions to which he has arrived, we shall now briefly allude

It is well known to the reading members of the profession that several years ago Dr. Ware published his "Contributions to the History and Diagnosis of Croup"—a work evincing more scientific research, and containing more information with regard to the true pathology of membranous croup, than all that has been previously written in America. In these papers, Dr. Ware refers to thirty-nine cases of what he denominates membranous croup, which were noticed in his own, or in the practice of his friends. Of these cases the state of the fauces was observed in thirty-three instances, and "in thirty-three instances, and "in thirty-two a false membrane was present; most frequently, and sometimes only, on the tonsils, sometimes on other parts also, as the palate, uvula, and

* In a case of membranous croup that occurred in this city, the history of which was received from the attending physician, a prominent surgeon was called, by request of the family, in consultation. The case had advanced until the symptoms were very urgent, and prompt measures were demanded, to save the life of the child. The physician in attendance proposed cauterization of the parts rather than tracheotomy. The consulting surgeon positively refused to accede to the adoption of this plan, on the ground, that it was a dangerous, and in such cases, a worthless measure. The physician, however, persisted in his proposal, and the surgeon retired. Cauterization of the larynx was then promptly and perseveringly employed, and by this means the life of the child was saved:

pharynx. In one case no such membrane was present; but it was found to exist in the larynx after death. These thirty-three cases were treated by the ordinary therapeutic measures; and of the whole number, *three* only recovered—in thirty, the disease proved fatal. It is not at all surprising that, under these circumstances, Dr. Ware, eminent for his careful investigation and conscientious inquiry after truth, should have become “confirmed in the opinion,” as he subsequently declares himself to have been, “that the methods of treating this disease, in common use, require a careful reconsideration;” nor that he should have propounded the question, “If the mode of treating croup commonly adopted, does no good, are we sure that it does no hurt?”

Having concluded, after the experience to which we have referred, to treat the disease “without the persevering use of the heroic remedies,” Dr. Ware subsequently adopted a method in which “the treatment consisted—

1. “In the absence of all reducing, depleting, and disturbing remedies.
2. “Keeping the patient under the full influence of opium combined with calomel.
3. “Constant external application of warmth and moisture (to the neck), and of mercurial liniment, slightly stimulating.
4. “Constant inhalation of watery vapor.”

In March, 1850, Dr. Ware read before the Suffolk District Medical Society “Additional Remarks on the Treatment of Croup,” in which paper he refers to five cases of membranous croup, three of which were treated on the method indicated in the preceding propositions. The history of these five cases, as briefly narrated by Dr. Ware, with the conclusions to which he has arrived, we shall take the liberty of giving in his own words:

“The first case was that of a male, four years old, who was taken with membranous sore throat, accompanied by high constitutional irritation, Oct. 14, 1845. No croupy symptoms appeared till Oct. 18, when they were manifested in a perfectly distinct manner. On the 20th and 21st, patches of false membrane, with bloody sputa, were raised—and one piece of four inches in length. The raising of the latter was accompanied by a severe and suffocative paroxysm of coughing. On the 22d he died eight days from the commencement of the disease and four from the access of croup. The suffering in this case was very considerable, but far less than I have been accustomed to witness in cases of croup treated according to the ordinary method.”

“The second was that of a female, four years of age, taken with croup on the 8th of November 1845. No depleting or reducing remedies were employed. Patches of membrane, and one piece of considerable size, were brought up on the 10th, and a few following days. She never suffered much, improved steadily, and the 15th seemed well in all respects except the voice, so that on the 16th I did not see her. On the 17th there was a return of all the croupy symptoms, including the appearance of lymph upon the tonsils, and she died on the night of the 19th, eleven

days after her first seizure. During no part of the disease was the suffering from dyspnoea very intense for any continued period.

"On dissection, the usual appearances were found, and in one lung the false membrane extended for some distance into the bronchi in the substance of the organ."

"The third case was a female, six years of age, who was seized with the disease Oct. 31, 1847. The onset of the disease was gradual, yet quite distinct. Nov. 2d, the symptoms had become quite severe; and Nov. 3d, there was bloody expectoration, and pieces of membrane were spit up. Pieces of membrane continued to be found in the sputa for several days, and she was very comfortable and breathed with tolerable ease, yet never losing the distinct croupy sound of respiration and voice. She retained some appetite and sat up and amused herself, as usual. On the 8th she became rapidly worse, but without distress, and died on the 9th, quite easily, ten days from the first attack of the disease.

"It will be admitted, I think, that these cases, especially the two last, exhibited certain differences from the common course of this disease, which indicated a favorable influence from difference of treatment.

"In all of them the membrane was thrown up in considerable quantities.

"In all of them the disease was attended by very much less distress than is usual in croup, and, in two, there was so decided a mitigation of symptoms following the separation of the membrane, as to lead to considerable hope of a favorable termination.

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"In two, at least, the disease was prolonged to at least twice its average duration under the usual treatment.

"In the two other cases, to which reference was made, the same general course of treatment was followed, with the addition of the introduction of a sponge, wet with a solution of the nitrate of silver, into the larynx. In each of these cases the application was made as early in the disease as I became satisfied of its distinct character. It was repeated morning and evening. It decidedly gave relief to the breathing, soon after each application, and both cases ultimately recovered perfectly. For the suggestion and adoption of this valuable addition to our means of treating this formidable disease, we are indebted, as is well known, to the enterprise of Dr. Horace Green, of New York. The profession, I think, owe to him a large debt of gratitude, for the energy and perseverance manifested in the introduction of this remedy, and I am the more disposed to render this tribute to him, because so many attempts have been made to detract from his merit in relation to it.

"I am well satisfied, from what I have now seen of this method of treating croup, as compared with that which has been followed for so many years, that it has the advantages which were pointed out in one of the preceding papers. It is a disease which I would treat without de-

pletion—except, perhaps, by a few leeches—without vomiting, without purging, without blisters, without antimonials, ipecac., and all those other nauseous remedies which have been usually resorted to. I would trust to opiates, perhaps calomel, emollients, and the local application of the nitrate of silver.

“I ought to add that many of my friends in the profession have informed me of cases in their practice, treated on these principles, which have recovered in a favorable manner.”*

Since the publication of Dr. Ware's paper, cauterization of the larynx, in the treatment of membranous croup, has been adopted by large numbers of medical men in New England, from many of whom we have received communications on this subject, expressing their full confidence in this therapeutic agent, when timely and appropriately employed in the management of croup.

Should we give a history of a tithe of these cases, which have been thus reported to us, they would occupy a much larger space than can be appropriated to this subject in the pages of the *Monthly*. In many instances—and this is the testimony of large numbers of practitioners, experienced in the disease—the morbid process has been promptly arrested, by topical medication to the surface of the tonsils and pharynx without the introduction of the sponge-probang into the larynx.

If the proposition, with regard to the pathology of the disease, be admitted, namely:—that the exudative inflammation in croup commences invariably, as a general rule, about the fauces and upper portion of the respiratory tubes, and extends from above downward, it must be apparent that no remedy can prove so effectual in arresting the morbid process as cauterization.

That this is the true pathology of the disease has been fully established not only by many impartial observers, but also by the success which has attended the practice founded upon this view of its nature: it is, moreover, so declared to be by some of the most eminent and experienced pathologists of the present day.

“In true croup,” says Rokitansky, “which is essentially a disease of childhood. the exudative process often affects the throat and pharynx, and it extends from the epiglottis through the larynx and trachea—in some instances to the minute ramifications of the bronchial tubes—but the points it most commonly attacks are the larynx and trachea.”†

Prof. Hasse, also, whose late work on Pathological Anatomy has been translated and published by the London Sydenham Society, observes, with regard to the exudatory inflammation of croup, that its progress is invariably from above downwards, and that it never spreads in the opposite direction. “This law is so universal, that where plastic inflammation occurs in the bronchi of the adult, as the concomitant of pneu-

* Boston Medical and Surgical Journal; Vol. xlii., pp. 276, 268.

† A Manuel of Pathological Anatomy. By Karl Rokitansky, M D, Sydenham Edition, vol. IV., pp 20, 21.

monia, it can only descend to the pulmonary cell, never mount to the larynx.*

Still farther to sustain these views, not only of the nature of the disease, but of the positive efficacy of topical treatment in every stage of membranous croup, we shall proceed to adduce further testimony on these most important points.

In a recent number of the "*Archives Generales de Medecine*," is an interesting memoir by M. Vouthier, on the history of croup, as it occurred in an epidemic form in *L'Hopital des Enfants Malades de Paris*.

In this paper are the details of several well-marked cases of membranous croup, which were treated successfully by "emetics and cauterizations;" and although in these instances the argentine solution was not conveyed into the larynx, but was applied only to the fauces and pharynx, yet the patients recovered perfectly under the treatment.† Although the cases thus treated are characterized as having been very severe—"trés-intense"—yet, as the treatment was early adopted, it is probable that the exudative process had not extended into the larynx; for, in the same paper is a history given, of five other cases of membranous croup, in which the disease, having reached the larynx, was not arrested by cauterizations. This measure was employed, as in the other cases, but no attempt was made to pass the instrument below the epiglottis. Tracheotomy, however, was resorted to in all these five cases, but every patient died. Efficient cauterization of the larynx, we maintain, would have saved three, if not more of these last cases.

A few weeks ago, a physician from the interior of one of our South-western States, called on to state his experience in the treatment of croup by local measures. Two or three years before, he had passed several weeks in our city, and had then seen, for the first time, the employment of topical medication for the treatment of laryngeal and bronchial diseases. Returning to his home in the West—a region noted for the frequency with which croup occurs among children—he commenced at once to put into practice the new method of treating disease, with which he had recently become acquainted. During his previous practice, he had treated many cases of croup in the ordinary method, and the proportion of deaths, in his experience, as he stated, had been quite equal to one-third of the whole number attacked. But since the adoption of topical medication, during the two or three years after his return, some fifteen cases, he affirmed, had come under his observation, and were treated by cauterization, and were treated by cauterization of the fauces and larynx, *every one of which recovered*. The plan adopted by this physician was the same as that, to which we shall briefly refer, at the close of this paper.

(To be Continued.)

* An Anatomical Description of the Diseases of the Organs of Circulation and Respiration. Sydenham So. Edition, p. 276.

† Archives Generales de Medecine; Tome xix, art 1st.

On a new method of preserving Anatomical and Pathological Specimens. By JOHN H. BRINTON, M. D.

The preservation of the animal tissues, in such manner as to present unchanged, their normal and abnormal relations, has ever been an object of study and interest to the practical Anatomist, the Pathologist and the Surgeon. But as yet, all attempts to retain, in an unaltered state, the size, shape and color of parts, have to a certain degree been unsuccessful.

Anatomical objects have hitherto been preserved in one of two states, either wet or dried. Both of these methods are, however, inadequate; for if fresh animal tissues be immersed in alcohol, or any other antiseptic fluid, they become blanched in color, condensed in structure, and consequently modified in size and shape. At the same time, they present inconveniences for demonstration. The method of preparation by drying is open to even more serious objections, since the parts are so shrivelled and displaced as to convey but an imperfect idea of their primitive relations.

Now, since this shrinking of the tissues and their decomposition, depend most probably upon atmospheric influence, it recently occurred to me, that should I be able so to exclude the air, as to cause all evaporations to cease, I would effectually prevent, not only the desiccation of the part, but also its decomposition. Acting upon this idea, I commenced a series of investigations; the success attendant upon which, up to the present time, has led me to submit the results to the profession.

My object being to encase hermetically every portion of the specimens, I selected for my earlier experiments a solution of gun cotton in ether, the ordinary collodion. By means of a brush, I applied this carefully upon every portion of the external surface of the object to be preserved. The ether quickly evaporating, a thin pellicle of the cotton was left, coating the entire preparation. This process was then repeated, and the preparation finished by the application of successive layers of damarra, copal and shellac varnishes.

But it early became evident to me, that collodion was entirely unfitted for the preservation of the generality of specimens, especially for those of any size and bulk. It possesses too slight a degree of tenacity, and is liable to become fissured, and to chip off; at the same time its tendency to form white opaque layers, when moisture is present, renders it unsuitable as a transparent coating. I was, therefore, obliged to make use of some protective material, and for this purpose I selected gutta percha. This I dissolved in benzole, adding at the same time to the solution, a few grains of caoutchouc in order to increase the elasticity of the pellicle. By filtering the viscid dark-colored result through animal charcoal, a perfectly colorless solution may be obtained, which upon application deposits a tenacious film.

This film, unlike that left by the evaporation of the ethereal portion of the collodion, evinces but little tendency to opacity; and, indeed for all practical purposes, may be said to be perfectly transparent. The te-

nacity of the thinnest pellicle is very great; it possesses sufficient elasticity, is not liable to crack, and thus far has proven amply sufficient to prevent the occurrence of evaporation, shrinking and decomposition. At the same time, by repeated applications of the solution, the coating of gutta percha can be increased to any desirable thickness.

To prepare a muscular specimen, as, for example, one exhibiting the relations of the arm and forearm, a limb should be selected which has been previously injected with the chloride of zinc, arsenic or other antiseptic solution. When the parts have been sufficiently exposed by dissection, the whole limb should be coated with the colorless solution of gutta percha: a transparent pellicle will then be left by the evaporation of the benzole. This process should be repeated until a layer of considerable thickness is obtained. Upon the muscular mass, the gutta percha may be applied in much greater quantity. Should opacity here result, it matters little, as in consequence of the blanching of the muscle, dependent upon the previous antiseptic injection, an artificial coloring process will be necessitated. In preparations, however, of perfectly fresh muscles, or of those which have been injected with Horner's solution, this will not be the case. The layers of gutta percha having been obtained of sufficient thickness, it will be found desirable to apply next a coating of collodion, which has been filtered, and then mixed with Venice turpentine. This preparation possesses no contractile powers whatever, but is of great body and consistency. It splints, as it were, the specimen securely, and ensures stability and firmness.

In order to impart a proper hue to those muscles, whose color may have been affected by the preceding processes, I make use of collodion stained with the wood of the *Pterocarpus santalinus*, (the ordinary red saunders.) The resulting color, when varnished, simulates closely that of fresh muscles. The specimen should then be completed by the application of damarra and copal varnishes. The adipose tissues, the tendons, fasciæ, nervous and cutaneous surfaces will present almost the appearance of a recent dissection; the muscle alone will possess an artificial color, and even this can be avoided.

Each specimen should be mounted on a board separately, and I have found the most convenient method for so doing, to consist in the preparation first of its dorsal surface. The object should be placed upon the board; when the anterior surface, that intended for inspection and exhibition, can be finished in situ. I have also found it advisable to keep them covered by glass cases. The period required for the preparation and mounting of an object by the above process does not exceed five days.

I have now in my possession specimens of meat which have been preserved by the preceding method sixty days, without having been previously saturated by any antiseptic fluid. In one preparation which I examined, after removing the gutta percha coat at the expiration of forty-five days from its completion, no decomposition whatever had taken place. The fibres of the muscles were, however, somewhat blanched, and afforded a slight odor of the benzole used in the preparation.—

Exposed to the air, decomposition ensued at the expiration of four or five days.

I have prepared, in a similar manner, a number of specimens, not only of muscular, but also of nervous tissues, as the brain and spinal marrow. In these no shrinking has occurred, and no evidence of decomposition exists. On the contrary, the preparations now present a harder, firmer and more natural appearance than at the date of their completion. In the nervous preparations the natural color is retained, and is visible through the transparent coatings. I am at present engaged in making application of the process to the preservation of pathological tissues, and with every prospect of success. I believe also that botanical specimens may be preserved in a similar manner, and, indeed, it seems to me not impossible, that, at some future day, an extension of this method may be rendered subservient to the preservation of meats, and all fresh animal tissues.

A longer period than has as yet elapsed, is required, of course, to test fully the value of the above proceeding; at the same time the results already obtained seem to me so satisfactory, as to warrant me in laying them before the profession.—*Med. Examiner.*

NAPLES, June 23d, 1854.

"*Gleanings Abroad.*" BY AN EX-EDITOR.

MR. EDITOR:—Owing to the haste in which I drew up my last No., on the eve of my departure from Paris, I omitted to speak of sundry little matters which may perhaps interest your readers. Let us, then go back to *Naples*. On arriving off the port, at 7 A. M., we were visited by the *Sanitary Commission*, a very thick-headed, savage-looking trio, who held a parley with our captain, at two oars' length from the steamer.—After receiving all the necessary intelligence, they took their departure, to deliberate upon and decide our fate. In the meantime, we were quite uneasy as to the prospects of our being ordered to perform quarantine for ten days at the island of Nisida, opposite Puzzuoli. Although two weeks had elapsed since our departure from Paris, such is the dread of cholera in this region, and such the besotted ignorance and old fogysm of the high functionaries, that our position was anything but agreeable. However, in about two hours, we were relieved from our suspense, and allowed to land. Eighteen years previously, I had made the acquaintance of these same *old fogies*, and had then been condemned to suffer a quarantine of forty-eight hours, because, forsooth, we had touched at Genoa, and because that a vessel from New Orleans had arrived at Genoa in the month of February; the aforesaid port of New Orleans having, in the summer previous, been affected with yellow fever. This is a *fair specimen of progress* in this benighted country, where phthisis is yet considered contagious, where dying patients, or those supposed to be about to die, are transferred to the "dying ward," and where the miracle of the

blood of St. Januarius liquifying is still annually performed and believed in; it is in fact, essential to the preservation of good order, and to the stability of the government. In this same Naples may be nightly witnessed the interment of the poorer classes, as if they were cats or dogs.—The dead-carts arrive at the Campo Santo at eight o'clock, one of the three hundred and sixty-five pits are opened, and bodies which have been collected during the previous twenty-four hours are thrown out, unshrouded and coffinless, into this Golgotha. The spectacle is too shocking and revolting even for medical eyes. Yet, while man is so vile, is Naples a terrestrial paradise, "situated on the verge of Elysium, enjoying all the advantages of land and water, on the confines of earth and ocean" I found the *climate* variable, and dependent on the direction of the wind.—So late as the 28th of March, an overcoat was necessary, particularly when riding; there was also recent snow upon Vesuvius and the mountains adjacent; and when the sirocco blew from the coast of Africa, the effect was enervating, depressing both mind and body. When the tramontana comes down from the Appenines, the air is chilling cold; and invalids find great difficulty in keeping themselves comfortably warm; the doors and windows being very open, and fires a great rarity. The promontory of Sorrento, across the bay, is equable in temperature, and therefore preferred by pulmonary invalids. The *physique* of the Neapolitans is admirable, more especially that of the men, the women having but little beauty to spare; the physiognomy is Grecian. The *lazaroni* are walking Apollos, in grace and action perfect types of man.—Their diet is exclusively vegetable and farinaceous, macaroni being to them the staff of life. I am sorry that I cannot say much for their *moralities*, as the great mass of them are either *pimps, beggars or thieves*.—So adroit are they at stealing pocket handkerchiefs, that it is usual for travelers to carry this article of the toilet in their hats, or else not to trust themselves on the *pave* at all. The streets are narrow lanes, with beams stretched across, to keep the houses from tumbling together, filthy and offensive to the last degree: the Toledo and the Chiaja are exceptions in this respect. The *mortality* in Naples is very large, *one twenty-eighth* part of the population being annually carried off. This may be attributed, in part to moral and political causes, rather than to climate; I found on inquiry, that phthisis was very common. To the medical traveler, a visit to the *Museo Borbinico* is intensely interesting. He here sees a complete epitome of Roman life, in the vast collection of objects from Pompeii and Herculaneum. Not to enumerate any that are not of professional interest, he will here see the drugs of the apothecary, the instruments of the surgeon and accoucheur, and even the sign, painted in red letters, indicating the name and profession. I saw *lancets, probes, scalpels, sounds, catheters, dressing-forceps, cautery irons, cupping apparatus*, all made of bronze, with the cutting edges hardened by a peculiar process now unknown; also two *specula uteri*, one with two valves like Ricord's, another with three valves, opening by a screw ingeniously contrived to force open the valves. This last was remarkably well fabricated, and is as perfect as when first made. Here are also *gilt pills, boluses,*

and any quantity of *apothecary's ware*. To me, the most interesting relic in the whole collection was *the skull of the faithful sentinel*, that was found at the gate of Pompeii, at his post; his bronze helmet is in *capite*. There are two other skulls in this collection, being those of two culprits, who were found with their "feet fast in the stocks." The ashes of the wife of Diomede are here preserved, as is also the bone of the ring finger, with the gold ring attached. A *curious ring*, in fine gold, is here shown, with a *Phallus* engraved upon it, beautifully executed. This sort of ring was worn by barren women, in hope of becoming fertile.

In the apartment of the "*Oggetti riservati*," which is now a sealed room and inaccessible, I saw, at my first visit in 1836, all those objects which, from their peculiar character or their *indecenty*, were not suited for the public gaze; such as ladies work boxes or flower stands with obscene figures upon them, necklaces, ear-rings, bracelets and amulets of the same character, steel-yards, and even a *sarcophagus* covered with the grossest emblems of obscenity and crime. This was Roman civilization; these are relics of the days of Virgil and Cicero, of Mæcenas and Horace, of Varro and Hortensius; this the Augustan age of Heathenism. In the city of Pompeii, whence most of these objects were procured, one sees yet, upon the walls of two houses, a relieve representation of the god *Priapus*: whether these were for the residence of public women or not, is a disputed point among antiquarians, but the probabilities are in favor of their having been so appropriated. The temple of Æsculapius, and also of Mercury, are in good preservation; an apothecary's shop has for its sign a serpent devouring a pine apple, emblematical of Prudence triumphing over Death; it is numbered, and the name of the proprietor is on the wall in red paint. The streets are narrow, the houses have low ceilings, with an open court in the center, a covered portico, into which open several small apartments, with no ventilation except through the doors. The house of Diomede, the largest yet discovered, has three stories, but two of them are under ground; *twenty-eight skeletons* were found in this house, two of them, that of Diomede and his slave, being found very near the door, running away, the former with a bag of money in his hand; his wine cellars are in perfect preservation, and were well filled; it is situated hard by the Herculaneum Gate. Only one-fifth part of the city is uncovered by the excavations, and as these are still progressing, we may expect still more interesting discoveries, and may yet find a complete *armamentum chirurgicum* of some Pompeian Valentine or Sir Astley. The *Grotto del Cane* on the Lake of Agnano, two miles from Naples, is, to the medical philosopher, worth a visit. The cave is on the hill side, the floor of the cave being of sandy loam; it is kept closed by the door when not in exhibition. On approaching the cave, the guides demand whether you will see the "*sperimento*:" the bargain being made, which, in our case, was for four carlini, a terrier dog is taken and laid down on the floor of the cave with the door open; he is held down at first for a few seconds, when he becomes insensible, the respiration very labored, with discoloration of the lips, upturning of the eye, and frothing of the mouth; after one and a-half minutes he is taken out and

thrown upon the green sward, where he soon recovers himself, and is about as lively as before. Indeed, I was surprised at this rapid recovery from the effects of the poison. *Three minutes' inhalation* of the gas is fatal. The stream of carbonic acid gas is about twelve inches in depth, and can be easily dipped up in the hand or hat, having the characteristic pungent odor; the extinguishing of the torch is beautifully shown, and the line of gas is very level throughout. Near by is the Grotto d'Ammonia, with deposits of the carbonate on the sides of the excavations, and a very powerful odor of carbonate of ammonia. On the opposite side of the road are the hot baths of St. Germano, much used in rheumatism; they are open at the top, as the vapor is too hot to be respired in a close room. On returning from Baia, we visited the *hot baths of Nero* on the sea side, half way up the rocky bluff, and extending for some distance into the calcareous tufa; hot vapor is seen escaping by the roof of the cave; the guide took a pail with an egg in it, and went down; after two minutes he returned panting, and dissolved in sweat; the egg was overdone. The present guide has been on duty for two years. I enquired for my old acquaintance, his predecessor; but he had *been boiled out of existence* some time since. The miserable appearance of the present guide convinced me that he could not take six and eight vapor baths a day without great detriment. These baths are much resorted to in summer by gouty and rheumatic invalids. Near Puzzuoli are other hot baths.—Indeed the whole line of coast, from Misenium to Vesuvius, abounds in hot springs, &c., occurring in the tufa rock. Above Puteoli or Puzzuoli, on a high hill, is the *Soltafara*, a crater of a volcano now nearly extinct, here are extensive alum and sulphur works; the ground has a peculiarly hollow sound when struck by a falling body. At one extremity is a cavern whence the hot vapor rushes out with a noise like the escape of steam from a large boiler; this phenomenon is almost constant, and only ceases when Vesuvius, ten miles off, is in eruption. On descending to Pozzuoli, we were surrounded by *priapus merchants*, in brisk competition; these Priapi are in bronze and well made, with a small ring for suspension round the neck, or to a watch-guard. Whether they are now sold as *charms against barrenness*, or as *obscene objects*, I am not prepared to determine; certain it is, that they are offered indiscriminately to *ladies* as well as gentlemen. It must also be borne in mind, that this occurs in the city of Puteoli, where the great apostle to the Gentiles landed on his way to Rome. A sermon from such authority would surely not be out of place at the present day. This exhibition is only one of the many relics of heathenism now met with in this region. I have done with Naples.

Yours,

J. G. ADAMS.

—*N. Y. Medical Times.*

Pulse of Various animals.—The pulse of several domestic animals, as given by Vatel, in his "Veterinary Pathology," is nearly as follows: Horse from 32 to 38 per minute; ox or cow 25 to 42; ass 48 to 54; sheep 70 to 79; goat 72 to 76; dog 90 to 100; cat 110 to 120; rabbit 120; guinea pig 140; duck 126; hen 140.

Milk-Sickness. By A. G. HENRY, M. D., in a Letter to the Editor

Dear Sir:—I noticed in your Journal, for June, a paper from Dr. Thompson, on milk-sickness, in which he advances the opinion, that the disease is of malarious origin, instead of animal or mineral, and his facts go very far, in my judgment, to confirm that view of the subject. During my residence in Pekin, on the Illinois river, in the years 1845-6 and '7, I investigated the history of the disease in connection with its existence in a particular locality in that vicinity, and the investigation developed the following facts:

The disease had prevailed to a considerable extent in a particular locality on the Mackinaw creek, some two or three miles from where it empties into the Illinois river. The people in the vicinity had located the cause of the disease within the compass of a few hundred yards on the Mackinaw bottom, and its greatest prevalence in the fall, after the grass upon the prairies had dried up. The cattle then took to the bottom, and soon showed symptoms of the disease. This was in October, after the frosts had killed the vegetation on the prairies, and after the malarious influences of that very highly malarious region had ceased to operate upon the inhabitants in the vicinity. The cattle that were kept from this locality, although within reach of the malarious influence, never showed symptoms of the disease. No individual in that vicinity for once questioned its animal origin, and that animals contracted the disease from eating a particular vegetable peculiar to the locality, and which remained green after the grasses had dried up; and the following facts amount to very strong presumptive evidence of the propriety of these conclusions.

The disease had showed itself, for many years about the same time in the fall, without any exception until the fall of 1844. That season was a very wet one, and the Illinois river rose to an unusual height, and remained up until late in the season, consequently the back-water from the Illinois, with the high state of Mackinaw, kept this particular locality submerged, for the *first time* for many years, until all the annual vegetables were destroyed, so that when the bottom became dry in September the locality was entirely bare of vegetation.

The usual malarious diseases of that vicinity obtained their usual prevalence, and without any unusual precaution, *no case of milk-sickness, either in man or beast, was known in that vicinity that fall.* The spring following (1845) I removed to Pekin, and learning the foregoing fact, I had my attention particularly directed to the matter. I resided three years in Pekin, and I heard of no case of milk-sickness in that locality until the fall of 1848, when it re-appeared as formerly. During my residence of three years in Pekin, I practiced in the neighborhood where there were more cases of malarious disease, than in any other neighborhood in the vicinity, yet nothing simulating milk-sickness was met with.

The disease in this locality could not have depended upon "*a mineral*," for no change had taken place in the springs or other water-courses, to explain the immunity from the disease for three years. But we have, to

my mind, a very satisfactory cause for the suspension of the disease in the killing of the vegetation, and which required some three years for its re-production.

It may be explained very plausibly, perhaps, upon the principle of malarious influence, but the foregoing instance proves to my entire satisfaction that the facts and arguments are altogether in favor of the doctrine of its animal origin through the agency of some unknown vegetable. I have not heard of the existence of the disease on the Pacific coast, where the *Rhus Toxicodendron* and every other variety of the plant grows in abundance and when the ground is covered with snow, horses subsist for weeks upon it with entire impunity, while its touch is poisonous to myself and my family.

LAFAYETTE, Oregon, Oct. 2, 1853.

THERAPEUTICAL RECORD.—*Angina Pectoris*.—M. Carriere (Bull. de Therap., i. p. 7) has recommended the inhalation of chloroform, at the commencement of the paroxysm. Duchenne (Ibid.,) in addition to this measure, has employed with advantage the "electro-cutaneous excitation" in the mammary region.

Cataract.—M. Lopez (Bull. Gen. de Therap., 1854, ii. p. 89) has employed with advantage iodide of potassium taken internally, and vesication on the temples, in cataract. The treatment was persevered in for five or six months, and in three cases out of four was productive of great benefit.

Fever, Continued.—Dr. Brinton recommends at the commencement of fever, an emetic of ipecacuanha (℥j of the tincture;) afterwards a stimulant plan is adopted, consisting of the administration of *small quantities* of brandy with water, beef, tea, &c. In great abdominal pain and tympanitis, turpentine stupes and enemas are used. (For the enema the following prescription is given:—Spirits of turpentine, minims xxx; tincture of catechu, ℥ij; tincture of opium, minims xv; decoction of starch, ℥ij.) The rate of mortality was 10-4 per cent.

Silk Instead of Sponge for Laryngeal Probang.

It has been recently suggested that a ball of silk floss, or ravellings, securely attached by sewing through and through loosely, is much superior to the sponge for making topical applications to the vocal organs. It imbibes a sufficient quantity of the solution, and produces less irritation in passing through the "rima glottidis," less involuntary contraction, and can, therefore, in most instances, be passed beyond the epiglottis at the first or second application.—*Western Lancet*.

Sponge Pessaries.

Dr. A. P. Merrill, in the Memphis Medical Record, speaks very highly of the use of the sponge pessaries. He does not limit their employment simply to cases of prolapsus-uteri believing that engorgement of the cer-

vix, together with consequent ulceration, is often the effect of prolapsus. He is certain that he has seen both these attendant conditions relieved by a simple though permanent separation of the organ. He thinks that permanent cures are rarely effected by the application of caustic and astringent agents.

After preparing the sponge properly, a piece of twine is passed through its smaller end, in order more easily to effect its withdrawal; it is then smeared with mucilage to facilitate its introduction. The patient himself will soon learn how to use it.

Galvanism as a Substitute for Ergot.

Dr. Barnes, in an interesting paper read before the Medical Society of London, advocated strongly the use of galvanism in cases where ergot is usually resorted to. The discussion that followed, leaned strongly to the use of ergot as an ecbotic, should be restricted within narrower limits than at present. Raptures of uterus and vagina, with sloughing of the latter, and the death of the foetus, were cited as the effects of the use of ergot. Some of the members preferred the forceps in inertia of the uterus. In a case where the pelvis was very small, the child was turned, and decapitated after the delivery of the body; and the head remaining in the uterus, was driven through its parieties by the *ergotized* contraction of the latter. The ergot was of course administered before the extraction of the body, by an inexperienced student of medicine. We should be glad to hear from some of our correspondents on this subject. Galvanism though said by Simpson and others to be uncertain in its effects on the uterus, is an agent more under the control of the practitioner.—*Philadelphia Medical Journal*.

Rheumatism.

M. Trosseau cures acute articular rheumatism with veratim. One pill containing the tenth part of a grain of veratim is given the first day, two the second three the third, increasing a pill a day until a decided effect is produced.

Aneurism.

Coagulation of the blood is produced instantly, by injecting into the artery a few drops of concentrated perchloride of iron. A very fine trocar is used, made of gold or platinum, which is gradually insinuated through the parieties of the artery, obliquely. A small syringe, worked by a rask and pinion, is fitted to this trochar, and the fluid is forced into the vessel slowly, drop by drop. Every turn of the pinion forces in just two drops of the liquid. The circulation is arrested during the operation by pressure above and below. A few drops are sufficient to produce a firm and solid coagulation. The experiments hitherto have been mostly made on animals. Three or four drops have sufficed in a sheep, six or eight in a horse. But one operation for aneurism is reported, in the suborbital artery, which was entirely successful.—*Memphis Medical Recorder*.

Fissures of Anus

Dr. Giuseppe Peirano has used an application composed of three grains of extract of belladonna and four grains of unguentum. rosæ, with.

great advantage in fissures of the anus, an affection which is often obstinate and very painful. In numerous cases this remedy has not only relieved the pain but induced a cure when various applications had been used in vain.—*Revue Medicale. (From Gaz. Med. Lombarda.)*

Chloroform.

Dr. Hardy (Dublin Journal, Nov.), relates cases to show the efficacy of chloroform vapor directed upon the part in uterine affections. The vapor is applied by means of an instrument consisting of a metallic chamber, to one end of which a pipe with a valve is attached to the gum-elastic bottle. A sponge dipped in chloroform is placed in the metallic chamber, and then, by pressing on the elastic bag, the vapor is expelled through the pipe. In cases of carcinoma and simple ulceration of the os uteri, this plan appears to be very efficacious; but it is useful also in pruritus pudendi, sore nipples, and in other painful affections of the skin.

Mr. Nelaton (Gaz. des Hop. and Med. Times and Gaz., March 4.) relates a case in which the vapor of chloroform directed (by Hardy's apparatus) upon an abscess in the axilla, produced complete insensibility, so that the entrance of the knife was unperceived.

Diabetes Mellitus.

Dr. Basham (Lancet Jan.) relates two cases treated by the permanganate of potash, in doses of ten grains three times daily; the amount of urine was very slightly diminished; the sugar was augmented; the other symptoms were unaffected. Dr. Basham has employed alkaline treatment with advantage; the sulphate of soda was found to be useless. In one case opium was carefully administered, to the amount of three grains daily, but no striking effect was produced.

Gout.

Dr. Goolden (Med. Times & Gaz., Nov.) uses with good effect, as a local application, spirits of wine. The relief to the pain is said to be sometimes very great. In the same Journal the utility of an old remedy, the carbonate of soda, as a local application in gout and rheumatism, is referred to. A drachm of the carbonate is mixed with a hot bread poultice, and applied over the joint.

EDITORIAL.

Cholera in Chicago.

As the prevalence of the cholera in Chicago, judging from the frequent reference made to it in the public prints, has become a subject of general as well as professional interest, it may be acceptable to our readers to have a statement approximating the truth on the subject, as well as to learn something of the conditions predisposing to it, and of the peculiarities which the disease has presented.

Precise accuracy as to the number of attacks, or even of the fatal cases will not be attempted, as physicians have not made full reports of their cases, and of the burials, the causes of death have been frequently returned as "unknown."

As near as we can learn from our own observations and the accounts of others, we will state the facts in the case. The cholera commenced in Chicago in the latter part of April. A few isolated cases continued to occur scattered about in different parts of the city up to the first of June, being confined almost exclusively to the poorest class of foreign residents, and the immigrants recently arrived from Europe. The cases occurring during this period, all told, could not have amounted to more than sixty or seventy, but they presented the usual well marked characteristics of the disease, about one-half, or perhaps more, proving fatal.—About the first of June the disease emerged from the shanties and low, filthy and crowded dwellings where it had before been confined and made its appearance in circles where it became a subject of more intense public interest. During nearly the whole of this month, the attacks among well-to-do people were, however, very few in number, and principally confined to persons in feeble health, or those particularly subjected to the predisposing causes of the disease. The number of cases moderately increased among emigrants and the poorer classes, but nothing like a general prevalence occurred during this month. Serious diarrhoeas, however, presenting a cholera tendency, were somewhat prevalent during the latter part of the month, and considerable apprehension was felt in the public mind.

During the first week in July a decided increase in the prevalence of the disease occurred. Some prominent citizens were attacked, the people generally became excited; many were much alarmed, and from this time until about the fifteenth the disease may be considered as having reached the character of an epidemic, making in its onsets comparatively little discrimination as to the position and circumstances of the persons attacked.

Since the fifteenth, pure cases of Cholera have very sensibly diminished; the prevailing disease having changed its character—a mixed form of disease being most frequently met with, in which a miasmatic influence predominates, although a cholera tendency in many of the cases is strongly marked. A considerable proportion of the cases assume dysenteric appearance, the discharges being slimy and bloody, accompanied with pain and tenesmus, though in some instances quite free in quantity.

We are at this date (Aug. 5th) having very little cholera, and that little confined to emigrants and foreigners, while cases of Diarrhoea, Dysentery (of a modified form) and Intermittent and Remittent Fevers are somewhat prevalent. These are all of a manageable character under proper treatment.

In a population of about 70,000, the whole mortality for May, as taken from the City Sextons' reports, was 147, for June 331, and for July 912. It must be confessed that for a few days of the most severe sickness, there was some confusion in the accounts of the Sextons, and a few cases were probably interred in an irregular manner, which were not properly reported.

The greatest number of cases reported in one day was 44, while it is probable from the best information within our reach (and we have taken pains to investigate the subject) that for three or four days the number was as high as fifty per day. Of the proportion of deaths from cholera and other diseases, as already stated, we have not precise data upon which to rely, but during the month of July a little over one-half probably were from cholera, or about 500 during the month, which would make an average per day of 16 deaths from that cause. From this statement, which is very nearly the precise truth, it will be perceived that the accounts of hundreds being swept off daily, is entirely fabulous.

In some respects the sanitary condition of the city and its different parts has changed since the appearance of the cholera here two years

ago, and there has been a corresponding change in the prevalence of the disease.

Early in the season, on the appearance of warm weather, and till nearly the present time, the city generally has been in an unusually filthy condition; so much so that it was a subject of remark among our citizens and strangers before the cholera appeared; and soon after the disease made its advent, the Medical Society of the city presented a communication to the Mayor and Council, calling attention to the condition of the streets, alleys, and yards, and earnestly urging upon them "the importance of adopting some prompt, practicable and efficient plan for the removal of these sources of disease." In this communication the committee of the Society further said:

"In many of the streets, in almost all of the alleys, the gutters are obstructed to such an extent, that pools of stagnant water are formed and partly filled with decaying vegetables and animal matter, and in certain districts, the surface is still covered with the debris which always accumulates during the winter season, and from these sources is constantly exhaling a pestiferous miasm that must deteriorate the atmosphere, and produce deleterious effects upon the health of the community, strongly predisposing to attacks of any epidemic diseases, which may prevail during the hot season."

It is to be regretted that this communication, though receiving respectful treatment, produced little effect, and the consequences apprehended were not averted.

Since the prevalence of Cholera in 1852, an important change has occurred in the supply of water to the city. Then the "North Division" was destitute of any supply from the lake, except as it was brought in barrels by water carts, and the poorer and less careful classes of inhabitants, especially in the higher parts of that division, made use of well water, which was obtained from shallow wells into which it ran almost directly from the surface. The cholera prevailed much more extensively in that division during that season than in the south and west divisions, which were partially supplied by the old hydraulic works from the lake.

At the present time the north division is fully and freely supplied by the new works, and there has been much less of the disease there than in the other divisions. The greater part of the north division is high and sandy, and would have been more healthy in 1852 than other parts, had there been an equal supply of lake water. It is to our mind fearful to contemplate the results that would have occurred, had not the city gen-

erally, the present season, been well supplied with pure water from our fine hydraulic works.

The genuine, unmixed cases of cholera, have, throughout its prevalence, presented the usual symptoms and characteristics of the disease, some of them running their course in a very few hours. We have had abundant opportunity of testing the principle of treatment as detailed in a former article in this Journal, and have seen no reason for materially modifying the views there presented. We are confirmed in our opinion of the very general curability of the disease, if *seasonably* and properly treated—indeed, if called to a case before the system is exhausted by profuse discharges, and before the blue stage is fully set in, we have nearly as much confidence in arresting the disease, as we have in breaking up one of our western miasmatic fevers, and every enlightened and experienced western physician will understand how strong this confidence is. Still it must be confessed that occasionally a case is met with—perhaps one in fifty—so violent in its character and rapid in its progress, as to carry the victim beyond relief before time is given to put forth efficient action. The cases, however, which resist vigorous and persistent treatment applied to the earliest symptoms, are so exceedingly rare as not in the slightest degree to invalidate the general rule.

The mingling of different types of diseases in the same subject is not, perhaps, sufficiently dwelt upon by medical writers. There is, for instance, little said of the mingling of the cholera element with other forms of the disease such as fevers, dysentery, &c.; and yet such mingling exists. It has been more evident with us this season than we have ever before observed. Many of the cases of cholera have presented an intermittent type,—and nearly all the cases of periodical fever have presented a tendency to watery diarrhoea, or laterly to dysenteric discharges—or to a combination of serous and bloody discharges. In many cases the succession of symptoms has been as follows: First a profuse, painless, serous diarrhoea occurs; on this being checked a feverish development succeeds of an intermitting form, the diarrhoea returning often with severity during the exacerbation of the fever. If the disease is only partially controlled, and especially if stimulating articles, such as capsicum and brandy be used, great irritation of the mucous membrane occurs, marked by red tongue, quickened pulse, severe pain and bloody and mucous discharges. These are put up in many of the shops and recommended by some physicians, various “Cholera Mixtures,” such as as tinct. opium camphor, capsicum, ginger, spts. of ammonia, &c. These compounds,

taken as they often are in brandy, frequently, it is true, temporarily check the discharges, but as frequently in their after consequences are prolific sources of mischief, producing the gastric and intestinal irritation just referred to. As a palliative (and all these articles are usually but palliatives,) simple laudanum, or laudanum and spts. of camphor, are much safer domestic remedies to be used before a physician can be obtained, than these stimulating articles.

In the proper treatment of these complicated cases described above, after an impression has been made with opiates and mercurials, quinine, combined with opiates, in antiperiodic doses, is demanded. The quinine should be given early and freely—from a scruple to half a drachm, with from four to eight grains of opium, or its equivalent in morphine, should be given in from three to six doses during the first intermission or remission of the symptoms. Indeed, these doses generally operate favorably upon the immediate symptoms, and few cases are safe from the return of serious symptoms, often of a cholera character, where the quinine is not used. It is a sovereign remedy where it is applicable, and with it and calomel and opium properly managed, these cases almost universally, and for the most part speedily, recover.

The complications of cholera with periodical fevers and dysenteries are not the only ones which exist. Cholera symptoms are liable to occur during the progress of other diseases.

For example, a young man under our care in St. James Hospital, laboring under typhoid fever, during which the brain, the lungs, and the intestines, particularly the last two, had been quite seriously affected, but from which he was apparently slowly recovering, was seized with profuse rice-water discharges from the bowels, from which he sunk, blue and exhausted, and died in two or three hours.

The treatment of the cholera by different practitioners has by no means been uniform, and the success has been various. So far as our observation or information extends, but few decided cases have been entrusted to the Homœopathists, and these have uniformly resulted unfavorably. One Homœopathic physician, who, sometime before, had presented boxes of medicines particularly intended for cholera, to the editors of some of our papers, as we learned through their columns, though his case was not rapid, fell a victim to the disease. Later, some of the Homœopathists, at least, do not trust to their infinitesimals. We were shown, not long since, some "pellets" quite as large as bird shot, which had been left for

a patient with diarrhœa, by a Homœopathic practitioner, with instructions to take two every ten minutes, and which were so largely composed of camphor as to send forth an odor almost as strong as a mass of that substance, and to taste about as pungently when placed upon the tongue. Infinitesimals may serve to amuse nervous men and women, with their nervous complainings, and, indeed, may answer a purpose in managing many diseases which will get well of themselves, but they never used to answer for the decided miasmatic fevers of Michigan, and they will not do for the cholera in Chicago. We are glad to see there is a point beyond which the credulity of the people can not go.

In a future number of the Journal, we intend to give an abstract of a meteorological record, kept at Chicago, and trace the connection of the weather with the prevalence of disease during the season. A. B. P

P. S.—Since the above was in type the cholera has continued to diminish in the city, until at the present time (Aug. 21st), it may be said to have quite disappeared—we hope not to return this season at least. For the last two weeks only a few sporadic cases have occurred, and those principally among emigrants brought in upon the railroads from the east. Even a disposition to watery diarrhœa is seldom now met with, and dysenteries and fevers are not numerous or severe. We have great pleasure in recording, that on the whole, the health of the city is as good as usual at this season of the year. A. B. P.

Higby & Dickinson,

Of Detroit, keep the largest and best supply of surgical instruments to be found in that city. In looking at his stock shortly since, we noticed not only complete sets of Dentists instruments, eye cases, pocket surgical cases, Lalemand's porte-caustiques, tonsil instruments, etc. etc., but a great number of very handsome obstetrical, amputating, and trephining cases. The amputating cases contain instruments both for the circular and for the flap operations, large and small. There is besides a full assortment of specula, pessaries, catheters, stomach pumps, etc., etc.

To our friends who inquire of us from time to time, where they can order these things, we would say that they can suit themselves there better than at any other place in Detroit, as we know from personal observation, having made a pretty general examination of the places where instruments are sold in that city. E. A.

Obituary.

The students and graduates of Michigan University will be grieved to learn of the death of G. N. King, M. D., formerly a classmate with many of them in the Medical Department. The following notice of his death is from the *Republican Era*, N. Y. Dr. King when a student in Michigan University, won the esteem both of his classmates and of his instructors, and it is with regret that we must contemplate the blasting of his promise of usefulness to the world.

At a meeting of Western Union Lodge No. 147, of Free and Accepted Masons, held at their Lodge room in Belfast, July 20th, 1854, the committee appointed for the purpose, reported the following preamble and resolutions, which were unanimously adopted:

Whereas, it has pleased the Supreme Ruler of the Universe to call from earthly labor, our worthy brother George N. King, M. D., of this Lodge, it is meet and proper that we, his brethren, should render to his memory this tribute of love and esteem; be it therefore,

Resolved, That while we cherish the recollection of our deceased brother, we sincerely deplore his loss to the fraternity, to his country, and to his friends; that our brother the short time he has been with us has exemplified the principles of our fraternity, by his upright, kind and consistent conduct, and by the discharge of every duty, and that we have great cause to deplore the loss to the fraternity of so estimable a member.

Resolved, That we sympathize with the parents and relatives of our deceased brother, and tender them our condolence and trust that that strength which cometh from above will be vouchsafed to them.

Resolved, That as an expression of the regard which this Lodge feels for our deceased brother, that we wear the usual badge of mourning, and cause our Lodge Room to be clothed in mourning.

Resolved, That a copy of these resolutions be presented to the parents of our late brother.

Resolved, That the Secretary cause these resolutions to be published in the *Masonic Union*, *Republican Era* and *Angelica Reporter*, and a copy sent to the President of the Medical College, at Ann Arbor, Michigan; the President of the Medical College, at Castleton, Vermont; and to the President of the Allegany County Medical Society.

H. HUGHES,	}	Committee.
C. M. CRANDALL,		
J. D. NORTON.		

H. HUGHES, Sec'y.

Evansville Medical Journal.

This is a new and excellent quarterly published at Evansville Indiana, and edited by W. H. Byford, M. D., Prof. of Theory and Practice, and H. Ronalds M. D., Prof. of Anatomy in the Evansville Medical College. It deserves, and doubtless will get a good support.

Cholera in Detroit.

This disease has nearly left the city. We intended to present a full view of its present visitation in the present number, but the difficulty of analyzing in haste the conflicting accounts, and confused descriptions which reached us, has delayed the matter. We have, however, the promise of a careful account of it for the next number, to be drawn up by one of the physicians on the ground. The physicians of Detroit have acquitted themselves, in dealing with this season's cholera, with great credit both to themselves and to the profession.

Farmers' Companion.

We cannot forbear speaking of this splendid Agricultural Monthly. It contains an amount of scientific information, (besides the practical instructions of agriculture,) which is worth many times the price of the paper (50 cents per annum.) What we particularly notice is the chemical information contained in it; the analyses of various kinds of food, and the physiological facts which a scientific examination of the relation of vegetable productions to animals and men develops. Such a journal occupies the right position, and not only elevates the agricultural profession, but develops truths which are of peculiar value to the medical world.

Annual Announcement of the Medical Department of Pennsylvania College, Philadelphia.

This Institution commences its session on the 9th of October, and continues until March 1st. The department has been in a measure re-organized and improved, and offers new inducements to students.

Eighth Annual Announcement of Lectures of Starling Medical College, Columbus, Ohio.

The lectures in this institution will commence on Wednesday, October 18th, and continue twenty weeks. This college has been re-organized and improved, and the announcement presents a handsome and inviting appearance. For particulars see advertisement on the cover.

Annual Announcement of Jefferson Medical College of Philadelphia.

This institution opens its session on the 9th of October. The high reputation of its faculty is such, that they need no eulogy. Its prosperity seems to be on the increase.

Montreal Medical Chronicle.

We have just received this exchange for the first time, and shall be happy to continue to do so. Not having been able to hear from it for a long time, we feared it had gone out of existence, but we are glad to see that it is alive and full of interesting matter. It is published at Montreal C. E., and contains forty pages monthly. Edited by Wm. Wright, M D., & D. C. Mac Callum, M. D.

MISCELLANEOUS.

The University—A new Professor.—Mr. Henry S. Frieze, of Providence, R. I., has accepted an appointment to the Professorship of the Latin Language and Literature in the University at Ann Arbor. He is expected to enter upon his duties the first of October next. Mr. Frieze graduated at Brown University, R. I., in 1841, with the highest honors of his class; since then he has devoted himself to the teaching of the classics with uncommon zeal and success.

He takes the position which Professor Haven has filled, who devotes himself to the classics in Rhetoric and History, formerly in charge of Professor Whedon.

The improvements connected with the University are rapidly progressing. The dome of the Observatory has been finished, and that structure is now completed externally. It wants now but the finishing of the interior. The astronomical clock has arrived—the other instruments are not yet quite completed.

Dr. Brunnnow the newly appointed Prof. in Astronomy and director of the Observatory, has also reached Ann Arbor, and is engaged in superintending the work, and making the needful arrangements.

The next term of this noble Institution will open with a more valuable corps of Instructors and more extensive facilities for acquiring knowledge in all its various branches, than it has ever before possessed during any period of its history. It is a College of which Michigan may justly be proud.—*Detroit Evening Tribune.*

Dr. Brunnnow, the celebrated Prussian astronomer, mentioned in the above article, is the well known author of "Tables of the Asteroids," and other works which are used by astronomers throughout the world. In his personal appearance he is of medium height, has a large, massive head, and is full of a peculiar style of strong earnestness and enthusiasm. He spent a week or two while on his way here, in examining the Cambridge Observatory, and expresses his determination to make the one under his care excel that. His accession to the University corps is considered a most fortunate acquisition.

THE
PENINSULAR
JOURNAL OF MEDICINE
AND THE COLLATERAL SCIENCES.

VOL. II.

OCTOBER, 1854.

NO. IV.

ORIGINAL COMMUNICATIONS.

ART. I. — *The Cholera of 1854, in Detroit.* By Z. PITCHER, M.D.

This disease, wherever it may appear, and under whatever aspect it may be studied, will always engross the professional mind, until the doubts which now envelop its etiology shall be dissolved, and some principles established in relation to its pathology on which a rational mode of treatment can be based. Till then, the antecedents to its approach, its aspect on first manifesting itself, its association with other forms of disease, its absorption into itself (as now) of its Typhoid predecessors, and its final immersion into Dysentery and an asthenic form of Fever, will always form interesting themes of study to the student and profitable subjects of contemplation to the medical practitioner.

In these relations I propose very briefly to consider the Cholera of 1854.

As in 1849, so in 1854, the advent of Cholera was foreshadowed by an asthenic state of disease, no matter what might be its generic character, and immediately preceded by cases of Fever remarkable for their rapid tendency to collapse and to put on the habiliments of cholera, without the intervention of diarrhoea. Such cases of fever occurred early in May, after a few days of unusually hot weather.

The first case of Cholera which came to my knowledge, originated a little below May's Creek, just out of the city limits, and was brought to

St. Mary's Hospital for treatment on the 19th of May. The subject of this attack was a laboring man, who had had at different times, violent paroxysms of Intermittent Fever. At first, he supposed it to be only a recurrence of one of his febrile paroxysms, as he felt all the usual premonitory signs of such an accession. The sickness of the stomach which he ordinarily suffered from at the close of the cold stage of his fever, soon became severe and was followed by an exhausting diarrhœa. When he reached the Hospital, he was cold, very livid, and a good deal cramped. The remedies applied relieved most of the symptoms, but did not entirely stop the diarrhœa or produce a genial reaction. On the second day, he supposed himself better, but did not get warm. On the third, true to the type of his intermittent, the algor increased and was followed by hopeless collapse and death.

A week elapsed before another case occurred. It happened as follows: An Irishman who had wintered on Drummond Island, Lake Huron, arrived by steamer from that place on the 26th and put up near the dépôt of the Central Rail Road. During the night he was attacked with Cholera. By morning he had already reached that stage of the disease when the spasms spontaneously cease and was cold and pulseless at the wrist, but not somnolent, or as deeply asphyxiated as the temperature would indicate. This man lingered six days, had green and acid eructations, and finally died of duodenal irritation and symptoms indicative of retained urea, without ever having regained his natural temperature.

The same night, a Mrs. F—n, advanced eight months in her period of gestation was attacked, in nearly the same locality. The symptoms of Cholera were checked early in the morning. No movement of the foetus was noticed after the attack. An imperfect reaction came on and a Typhoid Form of Puerperal Fever ensued which lasted five days, when she was delivered of a foetus in a state of decomposition and sank into a state of stupor and died.

Early in June the attention of the city government was called to this subject by the occurrence of a sudden death, reported as cholera, on Atwater Street, near the Hydraulic Tower. From inquiries made of other practitioners, I learn that cholera had already acquired domicile in the 4th and 7th wards of the city, among the newly-arrived immigrants, particularly from Holland, where it held such a relation to Typhus or Ship-Fever, that it was often difficult to determine in a given case, which of the morbid elements held the predominance. By the middle of this

month the epidemic influence of cholera was fully established. From this time to the first of August there was no appreciable mitigation of its force. Its decline was then almost daily perceptible till the 25th when we supposed it had left the city. Suddenly it broke out on Randolph, on Catherine and on Russell Streets with its characteristic virulence, then gradually retreated from the place, selecting its last victims from Congress and Clinton Streets, on the 12th of September. During the time of its continuance nearly fifteen hundred of the inhabitants of Detroit and its environs had been consigned to the tomb, not however by cholera alone.

The rigor of the past winter caused our annual arrivals of Typhus Fever, which have taken place every year since the famine in Ireland, to be postponed to a later period than usual, so that ~~this~~ element, as before remarked, augmented the difficulty of distinguishing in crowded apartments, cases of Cholera from cases of Typhus, when seen only in their advanced stages.

Among the arrivals from Europe, there was one man who reached this place late in the winter. As his case shows, in connection with the history of his fellow passengers, how the types of disease become blended during the prevalence of an epidemic meteoration, I will describe it briefly. On the voyage out, about seventy of his fellow passengers had died of a disease which, according to the newspapers, resembled both Cholera and Typhus Fever. It was attended by intense pain in the abdomen, violent cramps and coldness of the extremities, to which would succeed nausea and collapse, without diarrhoea. During the summer, but in a milder form, I have met with many analogous cases. The man himself was unwell when he left quarantine at New York. On arriving here he was very ill and applied for admission to the Hospital. The pains in his case were relieved by discharges of blood resembling prune juice, and large in quantity. His skin was cold and livid but not sodden as in cholera and his pulse feeble but not remarkably frequent. Under the endermic use of capsicum and carbonate of potash, and the internal use, in small doses, of Quirine, Dover Powder, and Hydrag. cum creta, this man recovered.

By the 20th of June we had cases of Typhoid Fever approximating Cholera, and cases of Cholera, which, after the establishment of reaction, so closely simulated Typhus Fever, that a person ignorant of the history of both, could not guess what had been the antecedent of either. Here

let me remark that I make a distinction, which to my mind is clear, between Typhus and Typhoid Fevers.

My post-mortem examinations this month (June) were mostly confined to Cholera subjects. The exceptions were those who died of Typhoid Fever. In the hurry with which such things had to be done during the prevalence of the epidemic, there were of course no injections made preparatory to the dissections, but from the color of the intestinal surfaces, it was evident that the engorgements were venous. The greatest degree of vascular turgescence was found in the stomach, near the pyloric orifice, in the duodenum and colon. On the peritoneal surface it was most conspicuous in the ilium. Between these two classes of subjects, I found, on post-mortem examination, a surprising analogy, when death had taken place whilst they were comparatively recent.

In the early part of July, I noticed a phenomenon new to me in the history of Cholera in this part of the country. At that stage of the disease, when from the violence of the duodenal irritation we have been accustomed to look for the eructation of a material resembling a mixture of verdeggris and water, we would have in its stead, as decided a black vomit as occurs in Yellow Fever, with dejections of a similar color. The mucous membrane in these cases was studded with ecchemosed points about the pylorus and along the colon.

From the 10th of July to the 20th of August, the Cholera became the predominant disease. Many who escaped an attack of it complained of loss of appetite and an epigastric uneasiness, indicative of incipient duodenitis, which made the alterative effect of the *Pillulae Hydrarg.* an indispensable necessity. Exposure to the sun in this condition, produced a violent train of symptoms called "*coup de soleil*."

Children during the whole of this period were liable to an aggravated form of Cholera Infantum, and would die with algid extremities and hot head, long before the secondary cerebral effects of that disease, as it ordinarily appears could manifest themselves.

I saw no class to whom attacks of Cholera were so appalling as to pregnant females. Seven out of ten cases of this kind which came under my observation, terminated fatally. The symptoms were nearly the same in all, yet differing a good deal, both from the consecutive fever of Cholera and uncomplicated Puerperal Fever. With one exception, there was neither the excessive blueness of Cholera, the abdominal tenderness, nor the asphyxia of Cholera or metro-peritonitis. But, instead of these,

some would expire with the calor mordax, and all with the ghastly aspect of Typhoid Fever, when ulceration has taken place in the plates of the ilium. Those who arrived at the full time, as a general rule did well, unless, as happened in some cases, the puerperal form of Dysentery set in. The Cholera this year has not been associated with so malignant a form of Dysentery as it was in 1849 and 1851. Neither has it been accompanied by as many manifestations of erysipelatous action as it was then.

Two cases of complication from the development of Erysipelas, one in a patient with Cholera and the other with Typhoid Fever, afforded such striking illustration of the unity of febrile affections or of the pervading and controlling influence of an epidemic force, capable of melting and producing homogeneity out of opposing and antagonistic elements, as we may choose to infer from the facts, that I give their history in this connection.

Trouvrage, a patient in the blue stage of Cholera, and Nelsinger, with Typhoid Fever, were admitted to the same ward and occupied contiguous beds in the St. Mary's Hospital, on the first of August. The latter, in addition to the ordinary symptoms, had acute and painful swelling of the parotid glands. Trouvrage became convalescent in the course of eight or ten days, and Nelsinger also improved till the 15th of the month, when unquestionable erysipelas showed itself in the parotid glands of both of them, followed by extensive suppuration.

I omitted to mention, when speaking of the "black vomit," that patients recovering from that condition in which this phenomenon appeared, expectorated a substance resembling a mixture of lamp black and molasses. Those recovering from a less profound state of asphyxia often found relief from the stricture in the chest, which is usually an attendant upon that condition, by the excretion of a bloody sputa.

When the presence of Cholera in Detroit became a matter of public notoriety, the sanitary police of the city was in a wretched condition. although its inhabitants are supplied with an abundance of *pure water and have adopted a system of sewers sufficiently extensive to carry off the surface water of the districts through which they extend. Nuisances existed in almost every direction, notwithstanding the facilities for their abatement.

* For an account of the relative purity of the Detroit River Water, and the water used in other cities, see the Analysis of Professor Douglass, as published by the Water Commissioners.

A conference took place between the Health Committee of the Common Council and the Members of the Detroit Medical Society which led to the adoption of measures for their removal. A Committee of the Board of Health were instructed to collect and publish daily the mortuary statistics of the city, so long as the Cholera should continue as an epidemic.

From the daily reports of the city sexton and the information obtained of the sextons of Elmwood Cemetery, Mount Elliott, and the Jews' burying ground, it appears that the number of interments for June, July, and August, were as follows:

In June	210
In July	781
In August	456
Total	<u>1447</u>

The greatest number of deaths in any one day, occurred on the 23rd of June and amounted to forty-one—equal to one out of each thousand of inhabitants, as Detroit, by computation, contains a population of forty thousand souls.

This statement of the number of deaths is believed to be entirely reliable. The proportion of deaths from Cholera can only be got at by approximation. It would be entirely safe to say that not over one thousand out of the whole number died of Cholera, making an average for the time included in this statement of about fifteen a day. The earlier cases of Cholera in the epidemic of 1854 seemed to be traceable to the influence of local causes, such as stagnant water, overflowing vaults, heaps of decaying animal and vegetable matter, and the use of surface water drawn from superficial wells in parts of the city to which our hydraulic system has not yet been extended; but as the season advanced special causation appeared to be lost sight of. Whether this is in any degree to be ascribed to the action of the city authorities in the abatement of nuisances, or that of the Water Commissioners in extending free hydrants to the destitute parts of the city, involves in its decision a question we have not now time to discuss, viz., the consideration of the doctrine of zymosis, or the theory of fermentation, as applied to the propagation of disease, either in the increase of the morbid elements, in the person of the subject, or in the atmosphere by which he may be surrounded.

So far as my observation has extended, the stronger emotions, as grief and fear, have been the most active agents in exciting to attacks of Cholera: next to these, such physical ones as tended to prostrate or paralyze the nerves of organic life. Beyond these, I profess to know but little of the causes of Cholera.

For the benefit of those who wish to study the relations which epidemics hold to the sensible qualities of the atmosphere, I annex to this report an abstract of the Rev. Mr. Duffield's meteorological record, showing the thermometric changes and the state of the rain gauge from the first of May, to the end of August, 1854.

If this paper should attract the notice of any one not familiar with the topography of Detroit, it may be well to state that it is situated upon a deposit of drift, which rises gradually to the height of twenty or thirty feet above the surface of the river.

It was not my purpose to speak of the treatment of Cholera, but having become convinced that much of the treatment adopted (an error in which I have participated) is too heroic, I will present an outline of the plan of treatment pursued at St. Mary's Hospital—a plan which has been eminently successful, and by which a large per centage of those received in the blue stage have been restored.

The first step in the treatment is to administer an emetic prepared by dissolving Chloride of sodium in an infusion of *Piper nigrum*. As soon as the operation is over, the patient takes from X. to XX. grains of the Chloride of Hydrargyrum.

Then the following mixture is given in \mathfrak{Z} i. doses, every fifteen minutes, half hour, or hour, as may be expedient, in view of the frequency of the evacuations, until they are checked.

R̄ Syrup Rhei Aromatic	℥i.
Acetate of Ammonia (liquid)	℥i.
Opiated Tincture of Camphor	℥i.
M.	

So long as the tongue is cold and flabby, they drink hot mint tea with brandy, after that, the temperature of the drinks may be changed.

The external agents used are dry cups over the epigastric and right hypochondriac regions, sinapisms, dry heat, and frictions with the dry warm hand over the seat of the spasms, when the extremities are cramped. This is to be departed from in individual cases as the symptoms and idiosyncracies require.

Detroit, September 16, 1854.

*Extracts from the Meteorological Record of Rev. Geo. Duffield, of
Detroit, for the month of May, 1854.*

Date.	Open Air.		Thermometer.		Melted Rain and Snow.		
	7 A. M.	2 P. M.	9 P. M.	Mean.	Hour Began.	Hour Ended.	Amt. inches.
1	53	68	55	58.6			
2	49	51	42	47.3			0.215
3	49	60	46	48.6			
4	54	66	56	58.6			
5	44	56	40	46.6			
6	42	50	34	42			
7	40	50	42	44			
8	44	69	49	51.6			
9	54	68	62	62			
10	62	62	50	58			0.326
11	60	70	56	62			0.120
12	62	72	62	65.3			
13	70	70	74	74			0.020
14	68	75	62	68.3			0.810
15	66	75	60	67			
16	54	68	60	61.3			
17	62	70	57	63			0.912
18	56	53	50	53			0.068
19	55	58	50	54.3			0.192
20	56	65	52	57.6			0.015
21	54	62	47	54.3			
22	56	61	52	56.3			
23	58	65	54	59			
24	61	65	58	61.3	2 P. M.		0.563
25	64	73	63	66.6			
26	66	75	61	67.3			
27	64	77	62	67.6			
28	64	74	64	67.3	9 $\frac{1}{4}$ P. M.	10 $\frac{1}{2}$ P. M.	0.041
29	64	74	64	67.3			
30	61	67	56	61.3			3.282
31	52	61	48	53.3			

*Extracts from the Meteorological Record of Rev. Geo. Duffield, of
Detroit, for the month of June, 1854.*

Date.	Open Air.		Thermometer.		Rain and Melted Snow.		
	8 A. M.	2 P. M.	9 P. M.	Mean.	Hour Began.	Hour Ended.	Amt. inches.
1	58	67	52	59			
2	63	74	56	64.3			
3	66	79	62	69			
4	70	83	65	72.3			
5	73	84	70	75.6			
6	73	76	66	71.6			
7	56	68	58	63			0.675
8	62	66	56	61.6			1.260
9	56	64	57	59			0.025
10	61	68	58	62.3			0.015
11	60	68	60	62.6			0.012
12	66	76	70	70.6			
13	70	74	61	67			0.003
14	70	77	66	71			0.005
15	72	80	78	76.6			
16	72	78	75	75			
17	66	74	67	69			
18	70	83	71	74.6			
19	78	88	73	79.6			
20	80	90	76	82			
21	73	79	66	72.6	5 A. M.		0.965
22	70	82	68	73.3			
23	74	78	66	72.6			
24	68	69	60	65.6			
25	68	78	68	71.3			
26	78	90	80	82.6			
27	85	94	84	87.6			
28	82	88	65	78.3			
29	72	78	72	74			0.110
30	62	73	61	65.3			3.010

*Extracts from the Meteorological Record of Rev. Geo. Duffield, of
Detroit, for the month of July, 1854.*

Date.	Open Air.		Thermometer.		Rain and Melted Snow.		
	8 A. M.	2 P. M.	9 P. M.	Mean.	Hour Began.	Hour Ended.	Amt. inches.
1	68	78	66	70.6			
2	76	88	75	79.6			
3	80	94	80	84.6			
4	86	95	81	87.6			
5	68	80	72	73.3			
6	80	87	72	79.6			
7	82	93	76	85.3	4 P. M.	4.30	0.680
8	85	93	75	84.3	3½ P. M.		0.141
9	66	70	60	65.6			1.923
10	68	76	65	69.6			0.065
11	72	83	63	72.6			
12	60	68	57	61.6			
13	68	75	64	69			
14	74	84	71	76.3			
15	78	85	72	78.3			
16	83	84	76	81			
17	79	84	72	78.3			0.012
18	82	94					
19	85	96					2.821
20	81	90					
21	71	85					
22	78	82					
23	76	82					
24	78	82					
25	76	86					
26	72	76					
27	76	75					
28	75	82					
29	78	82					
30	75	78					
31	78	89					

*Extracts from the Meteorological Record of Rev. Geo. Duffield, of
Detroit, for the month of August, 1854.*

Date.	Open Air.		Thermometer.		Rain and Melted Snow.		
	7 A. M.	2 P. M.	9 P. M.	Mean.	Hour Began.	Hour Ended.	Amt. inches
1	86	96					0.050
2	76	88					0.002
3	75	74					
4	70	78					
5	68	89					
6	70	79	58	69			
7	56	68	56	60			
8	56	71	58	61.6			
9	62	76	68	68.6	10 P. M.	10 $\frac{1}{4}$ P. M.	0.005
10	72	81	73	75.3	1 P. M.		0.003
11	70	86	68	74.6			
12	70	82	74	75.3			
13	72	82	63	72.3			
14	60	75	66	67			
15	70	78	67	71.6			
16	62	78	64	68			
17	58	72	60	63.3			
18	60	78	68	65.3			
19	58	82	70	70			
20	68	87	70	78.3			
21	70	90	76	78.6			
22	74	94	73	80.3			
23	70	89	78	78.6			
24	74	94	78	82			
25	74	90	72	78.6			
26	74	90	72	78.6			0.573
27	66	74	66	69.3			
28	66	80	68	71.3			
29	66	90	78	78			0.750
30	79	96	75	83.3			
31	72	80	76	76			1.383

ART. II.—*Researches on the use of Veratrine in the treatment of febrile diseases, and particularly Pneumonia, Typhoid Fever and acute articular Rheumatism, &c., by DR. ARAN. Translated from the French, by A. SAGER, M. D.*

In a patient with acute articular Rheumatism, the medicine was given alone for twenty-four hours. Three centigrammes had been quite accidentally combined, in six pills. The physiological effect was of the most marked character. But what more especially attracted attention was the great diminution in frequency of pulse, falling from 112 to 64, and even to 48 per minute.

In reading the more recent researches on the therapeutic action of veratrum viride, the author learned that an American physician, Dr. Norwood, regarded that plant as a certain remedy against all febrile affections, whatever might be their origin.

He immediately resorted to clinical experiment; and from the first series of observations our learned associate furnishes us with results of his investigations on veratrine in pneumonia.

In order to give an idea of the nature of the cases in which it has been tested, we will furnish here merely the heads of his observations, viz:

1st Obs.—Double pneumonia with pleuritic effusion in the right side. Antiphlogistication, veratrine, amelioration, relapse, cupping and visication of the chest, veratrine in large doses, rapid recovery.

2nd. Obs.—Pneumonia of the right side, treated by blood letting; persistence and aggravation from accidents, use of veratrine; rapid recovery.

3d Obs.—Pleuropneumonia of the right side in a tuberculous subject, treated exclusively with veratrine, rapid cure.

4th Obs.—Pneumonia of the right side in a tuberculous subject treated by veratrine; rapid amelioration, then signs of relapse; blister and veratrine continued; cure of the pneumonia; formation of a tuberculous cavity in the opposite side during convalescence.

5th Obs.—Pneumonia of the left side in a female of 70 years, treated without success with venesection and Tart. Ant et Pot.; veratrine used. Patient cured.

6th Obs.—Capillary Bronchitis and double pneumonia in a female of

69 years, the gravest complications, veratrine used in full doses; unexpected amelioration, relapse, death.

The detailed observations, furnished by the author in reference to those cases show.

1st. That in most cases, even after the first dose, but more frequently still, after the second or third dose of 5 milligrammes, the patient was affected with nausea, retching and vomiting, sometimes with hiccough, seldom with alvine dejections, and still more rarely with a sensation of burning in the esophagus and stomach. These symptoms, continued as long as the veratrine was exhibited in sufficient doses.

2d. That in each of these six cases the pulse fell, in the first 24 hours of its exhibition, from 24 to 60 beats. The rhythm was not at first affected, but while it became slower, it likewise grew smaller and feeble. In some cases, however, it became also vibrating, dicrotic, and very depressible, when the slowness became extreme, the regularity was frequently interrupted by the intermission of two or three pulsations.

3d. That from the first to the second day of the treatment, the respirations were diminished to six per minute.

4th. That in every case the depression of temperature was extremely marked, the skin, however dry and burning at first, became moist, cool and often bathed in perspiration.

To these deverified modes of physiological action, we must add its therapeutic agency, viz: The cough was always much diminished, the dyspnoea entirely disappeared, and the expectoration becoming much more easy, lost also much of its characteristic rusty hue. The physical signs were, however, less influenced by the medication than the general symptoms enumerated. In conclusion, Dr. Aran, in consideration of its violent action, thinks it should only be used in cases of great gravity and complication. It should be cautiously employed in a great number of cases, and the indications for its employment clearly made out before it should be admitted into the list of therapeutic articles.

In a second memoir, the author treats especially of its use in acute articular rheumatism.

From the considerations which he adduces on this subject, it results that veratrine is not a remedy of great utility in arthritic affections, and especially that it exerts but little influence over the pain which accompanies the disease.

He has observed that while in this disease as in pneumonia, nausea,

vomiting and hiccough occur; the depression of temperature and of the pulse was much less marked. He exhibits in conclusion the effect of the treatment of 8 cases of acute articular rheumatism with veratrine. In two cases of very acute disease, it completely failed; in four cases, a cure was rapidly effected, and in two similar cases it was impossible to continue it, because of the perfect intolerance of the remedy. He infers therefore that it is not entitled to the first rank as a therapeutic agent in this disease; that it should not be relied on as a general method of treatment, and thinks it more especially indicated in cases with endocardial or pericardial complication.—*From Gazette Medicale de Paris.*

Art. III.—*Auscultation and Percussion..* By DR. JOSEPH SKODA (of Vienna,) translated from the fourth Edition by W. O. MARKHAM, M. D. Assistant Physician to St. Mary's Hospital. Published by LINDSAY & BLAKISTON, Philadelphia, 1824.

The most beautiful characteristic in this work, is the remarkable clearness and simplicity with which Dr. Skoda reduces the bruits, rales, murmurs, and countless other sounds with most ridiculous names, which authors treat of, to their simplest elements. Many of our medical writers betray the most ridiculous ignorance respecting the laws of optics, acoustics, pneumatics and hydraulics; hence they are constantly riding off full gallop on some sophism in mechanics, or else trample in blundering heedlessness over all kinds of laws in natural philosophy. So does *not* Dr. Skoda. Without complexity and without confusion, he gives to simple mechanical principles their due importance and nothing more. He sweeps out of the way a host of uncouth terms, such as, "liver sounds, spleen sounds, bruit de Diable, etc., etc.," and first tracing the causes of the variations in sounds, founds upon these causes, a remarkably simple and beautiful nomenclature. We do not indorse all his opinions, nor quite like all his terms, but both his nomenclature and his positions have this beauty; they are laid down with such clear relations to matters of fact, that if they are true, they may be proved by observation and experiment, and if they are false they may be conclusively overthrown and destroyed by the same means.

Part 1st, is devoted to a description of the phenomena observable by the aid of percussion and auscultation. We extract from Chapter I., his account of the common sounds yielded by percussion.

THE PERCUSSION SOUND.

“Sound is propagated, according to the same laws, through organic as through inorganic matter, through living as through dead bodies; but the present state of our knowledge of these laws, does not enable us to explain satisfactorily all the differences of sound which we meet with in percussion of the thorax and abdomen; for this purpose further researches are necessary; we must first determine every possible variety of percussion sound, and ascertain the conditions on which each variety depends, and then endeavour to reconcile our observations with the well ascertained laws of sound. It is evident, that for the solution of this question, a vast number of experiments must be made, upon persons both in health and in disease, and on the body after death.

VARIETIES OF THE PERCUSSION-SOUND, AND THE CONDITIONS ON WHICH THEY DEPEND.

With the exception of distended membranes and chords, all the soft tissues not containing air, as well as fluids, yield, when percussed, a completely dull and scarcely audible sound, which may be exemplified by percussing the thigh. There is no difference in the percussion-sound by which we can distinguish between organs not containing air, such as the liver, the spleen, the kidneys, hepatized lung, or lung completely deprived of air by compression, and fluids: a hard liver yields the same sound as a soft liver, a hard spleen as a soft spleen—except when these organs contain bony or chalky materials—and blood the same sound as pus, water, etc.

We may readily convince ourselves of the fact, by placing these different organs on a non-resonant support, and percussing them one after another, either with or without a pleximeter; fluids similarly supported, and in sufficient quantity, may also be percussed by aid of a pleximeter, carefully applied to the surface.

The sound, thus obtained from these bodies, is scarcely audible, has no tone (Klang,) no distinct pitch, and no timbre, &c.

Bones and cartilages, when immediately percussed, yield a peculiar sound, but when covered by soft tissues, the sound they yield is less distinct, and altogether disappears, if the tissues are tolerably thick.

Every sound, produced by percussion of the thorax or abdomen, which differs in character from the percussion sound of the thigh, or bone, evidences the presence of air, or other gaseous bodies, in the parts beneath.

It may be proved by experiments on the dead body, that the soft parts of the thorax and abdomen must be made highly tense, to produce any other sound than the one peculiar to all soft parts.

The sound of the ribs is rarely heard, except in thin individuals, but that of the sternum, and the collar-bone, somewhat more frequently.—

The liver, the spleen, the heart, the kidneys, blood, water, etc., which yield to immediate percussion a completely dull sound, or, what is equivalent to it, no sound at all, likewise produce no sound when the parts under which they lie in the thorax and abdomen, are percussed. The walls of the stomach, and intestines, must be in a high state of tension, to yield sound when percussed, and the same remark is true of the parenchyma of the lungs.

The different sounds which percussion produces over the regions of the liver, the spleen, the heart, the lungs, and the stomach, do not depend on any peculiarities in these organs, but upon variations in the quantity, distribution, and tension of the air present in the regions in which they lie, and upon the force of the percussion stroke.

There is no such thing as a liver, spleen, heart, lung, or stomach-sound: the sound over the lung may, under certain circumstances, be exactly similar to the sound produced by percussion over the liver.

The various percussion sounds of the thorax and abdomen, cannot be arranged together in one class, comprising every degree of sound: it is necessary to distinguish four principal varieties: the extremes of these varieties, between which there are numerous gradations, may be represented by the following terms:

1. Full—Empty.
2. Clear—Dull.
3. Tympanitic—Non-tympanitic.
4. High—Low.

A full percussion-sound may be clear or dull, tympanitic or non-tympanitic, high or low; and the same is true, as regards an empty sound.

FIRST CLASS:—*Percussion-sounds. Full—Empty.* We do not judge of the size of a resonant body, by the strength of the sound which strikes upon the ear; the slightest vibration of a large bell tells of its magnitude; the loudest ring of a little bell misleads no one, as to its smallness; neither do we judge of the dimensions of bodies from the pitch of their sounds.

There is no good general term to designate, that quality of sounds which characterizes the size of bodies. I believe that in singing, and instrumental music, the word full, or full-toned, or sonorous, is used; I shall therefore borrow the expression, in speaking of the percussion-sound.—When any one percusses, with equal force, different parts of the thorax and abdomen, he will find that in some places the sound appears more persistent, and, as it were, spread over a larger surface, than it does in others; the first kind of sound, I call the full; the second, the less full, or empty percussion-sound.

A cavity, superficially situated in the lungs, of moderate size, and surrounded by thickened parenchyma, yields a very distinct percussion sound but of an empty character. The stomach distended with air gives a full—the small intestines, an empty sound. We do not, however, obtain similar full sounds in different individuals, even though the superficial extent of their lungs, and the amount of air contained in them, be exactly

alike; for the sounds are modified by the state of the walls of the thorax. The more yielding the walls, the greater is the effect of the stroke upon the contained air, and the more extensive the vibrations of the air thereby produced; but when the walls of the thorax are unyielding, it is difficult to obtain any sound, even from the parts which lie most superficially beneath them.

Let any one percuss portions of lung or intestines, when taken out of the body, and he will soon convince himself that it is impossible to determine with accuracy the size of the lungs, or the width of the intestines, by the aid of the varying full sound. It is only when the most marked differences exist, between the full and the empty sound, that any certain conclusions can be drawn; and the same remark must be true of these organs, when percussed with the body. A full sound, produced by percussion of the thorax or abdomen, indicates the existence of air beneath, through a space of at least several inches in extent, in every direction. A thoroughly empty sound, resembling the percussion-sound of the thigh, shows that there is neither air, nor any other gaseous body, beneath the percussed spot, but that solid fleshy bodies, or fluids, are present there.

The quantity of fluid, etc., necessary to make the percussion-sound, of any particular part of the thorax or abdomen, resemble the percussion sound of the thigh, depends upon the elasticity of the walls of the thorax and the abdomen, at the point percussed, and upon the condition of the parts in the space behind the fluid, etc. The more elastic the walls are, the more readily will vibrations spread through the subjacent fluid, etc., into any space containing air, behind or around the fluid, etc.; the greater this space is, the louder will the sound be.

The completely empty percussion-sound—the thigh-percussion sound—heard at any yielding part of the walls of the thorax, or the abdomen, indicates that no air is present in that part, for a space several inches in depth, and one inch or more in circumference.

Of this fact we may obtain the proof, by placing a portion of lung, or intestine, which contains air, under water, and then percussing its surface by the aid of the pleximeter; it will be found that the lung, or intestine, yields its proper sound, even though it be sunk several inches deep; but the nearer it is brought up to the surface, the more distinct the sound becomes.

SECOND CLASS:—Percussion Sounds, Clear—Dull. The words clear and dull, or muffled, will be taken in their usual significations. The sound of a drum becomes duller when covered by cloth; in the same way, we find the percussion-sound of the walls of the thorax and abdomen clear, in proportion as they are thin and elastic. When air is present beneath a thin and elastic portion of the thoracic walls, through a space about an inch in breadth, and not more than a few lines deep, and the remainder of the thoracic cavity is filled with fluid, or consolidated lung-parenchyma, the percussion-sound over that portion will be perfectly clear, but very empty. On the other hand, any portion of the lung, situated immediately beneath the thoracic walls, which has a surface not less in circumference than a pleximeter, and half an inch of thickness, will yield a full

but quickly muffled percussion-sound, if it be deprived of air, whilst the rest of the thorax is filled with the normally distended lung.

A small portion of intestine, lying against the abdominal walls, and filled with air, (the air having been expelled from the remainder of the intestines by peritoneal effusion,) yields a very clear, but empty sound.—A portion of the intestine, containing air, which lies in part beneath the liver, and in part in contact with the abdominal walls, yields, when percussion is practiced over the border of the liver, a muffled sound; but when the pleximeter is placed beneath the border of the liver, the sound becomes perfectly clear.

The truth of the above statements, may be readily shown by experiments on the dead body. A hepatized lung taken out of the body, yields the thigh-percussion-sound; but if only a small part of it contain air, and this part be percussed, it gives a clear, but very abrupt sound, having little reasonance, and which, according to my views, must be called empty. Percussion of a superficially infiltrated portion of lung, if it be equal in size to a pleximeter, and the lung otherwise healthy, yields a duller sound than the rest of the surface; and the thicker the portion deprived of air, the duller is the sound. The hepatized part of the lung may be as much as six inches thick, before the sound of the portion of lung beneath it, which contains air, is altogether obliterated, and before the sound becomes as dull as the thigh-percussion-sound. A portion of intestine containing air, and placed under water, so as to remain partially exposed to the air at the surface, yields, when percussed there, as clear a sound as though no part of it were covered by water; the sound of the intestine immersed in the water, and percussed through the water, is muffled, and becomes more so, in proportion as the intestine is sunk deeper.

From all this it is evident that the expressions, full and clear, dull and empty, have different significations. A percussion-sound may be full and clear, and also full and dull, empty and clear, and empty and dull. A completely dull, and completely empty sound, have naturally the same significance, and they are represented by the thigh-percussion sound. As a sound becomes duller, it at the same time always becomes emptier. A less full sound, however, is not necessarily a dull sound; a sound may be very empty, and yet perfectly clear.

The degree of dullness of the percussion-sound, does not always enable us to judge accurately of the thickness of the non resonant parts, beneath the spot percussed; for the dullness depends in part, also, upon the thickness and elasticity of the parts percussed, and upon the condition of the space containing air, behind the non-resonant parts.

THIRD CLASS:—*Percussion-sounds. Tympanitic. Non-Tympanitic.* The tympanitic percussion-sound passes gradually into the non-tympanitic, just as the full into the empty, and the clear into the dull; no distinct line of demarkation can be drawn between them.

The non-tympanitic is represented by the sound which percussion produces at those parts of the thorax, beneath which lies healthy lung, normally distended by air. An abnormally distended lung, as in vesicular

emphysema, gives us at one time a tympanitic, at another, a non-tympanitic sound. A partial emphysema in the midst of lung deprived of air (as happens in pneumonia, where not unfrequently the tissue around the hepatized portion, and especially at the borders of the lung, is emphysematous) generally produces a tympanitic sound; but if the whole of the lung is emphysematous, the sound is seldom distinctly tympanitic. If the lung contain less than its normal quantity of air, it yields a sound which approaches to the tympanitic, or is distinctly tympanitic. The sound is, moreover, in many cases remarkably tympanitic, even when the diminution of the quantity of air in the lung is the effect of an increase in its fluid or solid constituents; and this, too, whether the lung retains its normal volume, or becomes larger than natural. When the lung is much reduced in volume by compression but still contains air, its sound is invariably tympanitic.

That the lung partially deprived of air, should yield a tympanitic and when the quantity of air in them is increased, a non-tympanitic sound, appears opposed to the laws of physics. The fact however is certain, and is corroborated both by experiment on the dead body (which will be presently referred to,) and also by this constant phenomenon, viz.: that when the lower portion of a lung is entirely compressed by any pleuritic effusion, and its upper portion reduced in volume, the percussion-sound at the upper part of the thorax is distinctly tympanitic.

When the walls of the thorax are thin and yielding, the percussion-sound may remain tympanitic, even though the quantity of air in the lung be very small: this fact we occasionally observe in cases of pneumonia and tubercular infiltration. The condensed portions of lung, beneath the thoracic walls, thus thin and yielding give, in some cases, a distinctly tympanitic, though very empty, and not very loud sound. The percussion-sound is seldom tympanitic when the walls of the thorax are dense and unyielding.

When we percuss a lung—which contains a greater quantity of air in some parts of its structure than in others, that is, in which groups of strongly distended air-cells are mingled with others that are less distended, or contain scarcely any air—we find that it yields a sound in part tympanitic, and in part non-tympanitic.

Cavities of the lungs that contain air, lie near the surface, and are about equal to the size of a pleximeter, invariably yield a tympanitic sound when surrounded by consolidated lung-tissue; but when they are surrounded by healthy lung tissue, the sound is less tympanitic, or even non-tympanitic.

In pneumothorax, the walls of the thorax, if they are not much distended, yield a tympanitic sound; but if much distended, their sound is almost constantly non-tympanitic.

When the intestines contain gas, but are not forcibly distended by it, nor compressed by the abdominal walls, they always render the percussion sound of the abdomen tympanitic; but if they are much distended, or compressed by the muscles of the abdomen, the sound becomes less, or even non-tympanitic.

What has been here said respecting the causes which render percussion-sound tympanitic or non-tympanitic, may be proved by experiments. A healthy lung taken out of the body, and fully distended with air, when percussed through a pleximeter, yields a clear, full, non-tympanitic sound; but when not inflated, though it contain little air, and be even somewhat collapsed, it gives a clear, full, and tolerably distinct tympanitic sound. The percussion-sound is tympanitic also when water even to a considerable amount, has been injected, but not too forcibly, into a collapsed or inflated lung; if the quantity of water, however, be much increased, the sound becomes emptier and less clear. An emphysematous lung, which remains distended when taken out of the body, but is not otherwise changed in structure, has the same sound as a healthy inflated lung. Interlobular emphysema gives a decidedly non-tympanitic, and less clear sound, than a healthy inflated lung.

The sound of any part of a lung, which is infiltrated with serum, blood, or tubercular matter, but not entirely deprived of air, is tympanitic, and more or less empty and dull, according to the quantity of air present in it. The sound of a lung, containing merely a few solitary tubercles, does not differ from that of a healthy lung.

An inflated lung percussed through the medium of a piece of liver, sounds non-tympanitic, a collapsed lung containing air, tympanitic, but in both cases, the dull and empty character of the sound is proportionate to the thickness of the liver employed; and this must be very thick before the tympanitic sound disappears. The same results ensue, when a piece of hepatized lung is used instead of liver, or when the lung is placed under water, and percussion made on the surface of the water.

A healthy lung strongly inflated within the thorax, so as to be made to press against its walls, gives a full, clear, but non-tympanitic sound at every part where it comes in contact with the walls. In performing this experiment, it is necessary to make one or more openings into the thorax, in order to insure the inflation of the lung and its contact with the walls, by letting out any gases which may have been accidentally evolved after death.

If water be forced through the trachea into a lung, inflated in the manner described above, or after the lung has again collapsed and a portion of its air escaped—so as to cause a kind of artificial oedema of the lungs—it will be found, that the sound remains much the same as in a lung containing no water; and that a very considerable quantity of water must be thrown into the lung before any dullness can be detected in its percussion sound. Whatever be the amount of the water injected, the sound never becomes completely dull.

The percussion-sound invariably becomes full and clear, and at the same time either slightly or markedly tympanitic, whenever air is forced into the pleural cavity, so as to compress the lung. If water be thrown into the pleura, the percussion sound is clear, and either approaches the tympanitic, or is distinctly tympanitic, at every point at which the lung touches the walls of the thorax: where the water comes in contact with the walls, the sound is dull, and in proportion to the amount of water

present. If the quantity of water be not very considerable, the sound is often tympanitic.

Strong inflation of the stomach, or of a portion of intestine, causes these organs, when percussed, to yield a dull sound, approaching the non-tympanitic; but when greatly inflated, they give a clear tympanitic sound, if care be taken not to press the pleximeter so firmly as to distend their coats. A stomach, or portion of intestine, filled in part with air and in part with water, yields the same sound as it would do if entirely filled with air; but here, also, a clear tympanitic sound will not be produced, if the coats have been rendered tense.

When we percuss an intestine, through the medium of non-resonant organic bodies, as through portions of liver or spleen, or through water, we find the sound behaves itself exactly as in the experiment referred to with the lung. Percussion of an intestine, through the medium of a healthy portion of lung, produces a modified sound, composed of the sound of the lung, and of the sound of the stomach, and generally of a tympanitic character.

A dull sound, either slightly or not at all tympanitic, is produced by percussion of the abdominal walls, when they are stiffened after death, and firmly compress the intestines, even though these last contain a considerable quantity of gas, and gave a distinctly tympanitic sound before death, *i. e.*, when they were not so firmly compressed. If the abdominal walls be lax after death, then the sound is tympanitic, and it remains so, although a considerable amount of fluid be present in the peritoneal cavity: the same thing may be observed when percussion is made over the liver, a portion of intestine which contains air, lying behind it.

It is thus proved, both by observations on the living body and by researches in the dead, that the percussion-sound is invariably tympanitic, when the parietes of the organ, which contains the air, are not stretched; but that, on the contrary, when they are firmly stretched, the percussion-sound becomes less, or not at all tympanitic, and even dull.

Thus the fully distended stomach, the strongly inflated lungs, the tense thorax (as in pneumothorax,) the firmly contracted abdominal walls, produce a non-tympanitic or merely an indistinctly tympanitic sound: whilst, on the other hand, the relaxed stomach, the collapsed lungs, the compressible abdominal walls, give a distinctly tympanitic sound. Respecting the cause of these remarkable facts, it may be observed, that the tympanitic percussion-sound approaches in character to a tone (*Klang*) the non-tympanitic, to a murmur (*Geraus.*) A greater homogeneity of vibrations appears necessary, for the production of a tympanitic, than of a non-tympanitic sound. When percussion is made upon a non-distended stomach, it is the air alone within it which produces the sound; but if the stomach be strongly distended, its coats also vibrate, and these vibrations seem to interfere with those of the contained air, and thus to be the cause of the dull non-tympanitic sound.

FOURTH CLASS:—*Percussion Sounds—High—Low.*—Variations in pitch are most readily detected in sounds which are clear; but they are of little value in practice. This fact may be readily shown by experiments.

A narrow intestine gives a deeper sound than a wide one, but its pitch varies with every change in the condition of the intestine. The same fact is observed in percussion of the lungs. It is worthy of remark, however, that a change in the pitch of the sound—generally an elevation of it—often precedes the conversion of a non-tympanitic lung-sound into a tympanitic: this sign may be of value, if there be no other difference observable in the percussion sound. In fact, it occasionally happens, that the presence of tubercles in the upper part of a lung may be diagnosed by the different pitch of the percussion-sound over the corresponding part of the other lung."

(*To be continued.*)

ART. IV.—*Cholera Infantum*. A paper read before Cook Co. Medical Society, by DELASKIE MILLER, M.D., of Chicago, Sept. 5th., 1854.

Although the resolution which was adopted at the last meeting of this Society, requires the discussion of the effects of but one of the remedies for cholera infantum, viz, quinine; still as the indications for the use of this, like every other remedy, should be based on well defined principles, and as the indications vary with the different stages of the disease, I shall ask your indulgence while I review briefly the more important features of cholera infantum. This I deem the more admissible from the importance which attaches to this disease, on account of the frequency of its occurrence, and the fatality which follows its attacks. And though nothing very remarkable, either for its originality or novelty may be adduced, yet a point is gained by directing attention to the subject.

Cholera infantum is a disease of childhood afflicting children previous to the fourth year of age. It occurs during the hot season, viz, from May to October, and is characterized by diarrhoea, vomiting, rapid emaciation, and frequently by spasms of the muscles of the extremities.

By some, this disease has been regarded as peculiar to the United States, but a reference to the writings of Billard, Gendrin Copeland and Barrier, shows that they describe a similar disease under the names. "Follicular Enteritis," "Pyretic Follicular Diacrisis," "Choline Fever," &c.

It appears from the following statistics, that of all the diseases incident to infancy, in this country at least, this is one of the most frequent and fatal.

There occurred in Philadelphia, from 1807 to 1827, a period of twenty

years, 3,576 deaths from cholera in children. Under the general head of "Convulsions," for the same period, there were 3,192 deaths, for the same period of life. From 1844 to 1848 inclusive, there were 18,579 deaths from all causes, under fifteen years of age; of this number 1,611 died of cholera infantum, after this the largest number of deaths occurred from marasmus, (1060); from dropsy of the brain (1041); pneumonia (772); and from croup (756). These figures, with slight variations, would indicate the fatality from disease in early life in New-York, Baltimore, and in the cities of the middle and western States generally.

Nature of the disease.—The real nature of cholera infantum was but imperfectly understood, till the recent researches of Dr. Horner demonstrated its similarity with the follicular enteritis, described by Billiard in his work on children. Dr. Hallowell, in a valuable paper in the July number of the *American Journal of the Medical Sciences*, for 1847, describes it as endemic gastro-follicular enteritis, and considers it a disease of the follicular apparatus of the digestive canal. The names adopted by European writers, include inflammation, diarrhoea and softening. In those portions of this country, where it is regarded as endemic, cholera infantum occurs more frequently than in European countries, and is characterized by greater severity and fatality; it also affects a greater extent of the mucous membrane of the alimentary canal, than the "enteritis of children," as described by European authors.

The most constant and characteristic morbid appearances are *development* and *ulceration* of the mucous follicles of the stomach and bowels.

The appearances of inflammation have been noticed in about one-half of the autopsies recorded; in nearly an equal number of cases, the mucous membrane was found pale.

Softening of the stomach occurs more frequently, having been noticed in the proportion of 10 in 14 cases. Dr. Meigs considers "cholera infantum as a disease of the mucous membrane of the alimentary canal, which, beginning with morbid development of the mucous follicles, or crypts, independent of evident inflammation, occasions, first, hypersecretions from these organs, and after a time runs into inflammation, and its results, ulceration, thickening and softening." There can be little doubt but simple congestion of the mucous membrane of the stomach and bowels, and its consequences, constitute, in many cases, all the morbid appearances to be found in the alimentary canal.

"The liver is almost invariably enlarged, and more or less congested;

while the gall-bladder is filled with dark green bile, or a pale and almost colorless fluid. Dr. Page describes the liver as being, in some cases, large, soft, and spongy; and Dr. Horner, as being usually of a light yellow or mottled color."

The causes.—I shall consider the causes of cholera infantum under three heads: *Temperature*, *Dentition*, and *Malaria*.

That an elevated temperature has much to do in causing this disease, appears probable from the fact that it prevails during the hot season, viz, from May to October; and is most frequent and fatal in July and August. The hot weather of summer is peculiarly calculated to develop a disease like this, especially in children, by producing a high degree of erethism of the nerves, distributed to the cutaneous surface, and also to the mucous lining of intestines; at the same time causing a general relaxation and depression of the system. But that a high temperature alone cannot be the sole cause, must appear from the circumstance that the disease is less frequent in some of our southern cities, than in Philadelphia or New York.

Dentition.—Doubtless dentition exerts some influence in exciting and aggravating attacks of this disease, for whatever disturbs the equilibrium of the vital functions, disposes to diseased action, and dentition is known to cause very serious disturbance in the system. Still, this should not be considered the potent cause of cholera infantum; for, according to the tables of Dr. Emerson, this disease is most fatal in the first year; whereas dentition is most active during the second.

Malaria.—Miasmatic diseases prevail during the warm season; their causes are most potent at the time when cholera infantum prevails to the greatest extent. Now, as there is nothing in the organization of infancy, which could shield it from the influence of such a general and prolific source of disease as malaria, but on the contrary, the feeble powers of vital resistance would rather invite its attacks, it may be found that due consideration has not been given to this, as one of the causes of the frequency and great fatality of cholera infantum.

The symptoms also correspond, in many important particulars, with fevers of miasmatic origin, and when we bear in mind some of the peculiarities of the organizations of infancy, the great impressibility of the nervous system—the acute sensibility of the mucous membrane of the stomach and bowels—the position of the stomach, which approaches the perpendicular, thus favoring the easy expulsion of its contents,

under slight influences, we can understand how it is that malaria may cause the annoying symptoms peculiar to cholera infantum. A slight congestion even, of the mucous membrane of the alimentary canal, would cause the prominent symptoms peculiar to this disease.

Symptoms.—The invasion of cholera infantum is various; it most frequently commences with diarrhoea, followed, after an indefinite period by vomiting, which is succeeded very soon by fever, of the remittent type, with evening exacerbation. The pulse is small, quick, tense and frequent. In some cases, the onset is rapid and violent; vomiting and profuse purging, being among the earliest symptoms. The brain becomes early affected in some cases, which is manifested by a tendency to delirium, a wild and fierce expression of the eyes, and flushed face; ordinarily, however, the invasion is gradual, beginning with diarrhoea, after the prevalence, for a longer or shorter period, of restlessness, irritability, want of sleep and loss of appetite. In sudden and violent cases, the vomiting and purging are attended by the usual symptoms of exhaustion—quick, small pulse, coolness, or coldness of the surface, altered countenance, pinched and shrunken features occasionally, with spasms of the muscles of the inferior extremities, followed soon by more or less complete collapse. The stools are, at first, more frequent, abundant, and fluid, than natural—soon becoming light yellow, interspersed with spots of a greenish color. These spots generally increase, until the entire discharge partakes of that color. Whitish lumps may often be noticed in the evacuations which consist of undigested caseum. The consistence also varies according to the stage, severity and duration of the case. It is, at first, pasty, then semi-fluid, with more consistent portions intermixed, and finally it becomes quite serous. The odor also, is quite characteristic. In some cases it is excessively fetid, and produces in the attendants a sensation of nausea and faintness.

In some cases, the quantity is profuse, but in mild cases the discharges are small. In protracted cases, dysenteric complications sometimes ensue, manifested by the mucous and bloody discharges, and by the severe crying and tenesmic straining efforts.

The number of stools in the 24 hours is very irregular, varying from 4 to 15. Some extreme cases are recorded, where there are as many as 30 in 12 hours.

Vomiting usually commences on the 2nd day, occasionally as late as the third or fourth day. Sometimes, as stated before, it is one of the first

symptoms. The substances vomited, consist of the contents of the stomach, which are returned almost as soon as swallowed, mixed with mucus, and greenish matter. The severity of this symptom in many cases, is a correct index to the violence of the attack. In many cases it is very distressing, everything taken being immediately ejected with considerable force. In others, vomiting occurs only two or three times a day. This symptom seldom continues more than two or three days, though it may occur at intervals for a long time. With these symptoms, the patients always have considerable thirst, which in many cases is really agonizing. Every word, and look, and gesture, is a plea for water, which if allowed freely, only increases the thirst.

The febrile movement generally appears early, the exacerbations being accompanied by an increase of irritation in the stomach and bowels.]

If the anterior portion of the chest be examined after the lapse of several days, in severe cases, innumerable minute vesicles may be observed, appearing as if caused by sprinkling boiling water on the skin. Dr. Dewees regarded these vesicles with great interest, as he considered them an invariably fatal sign. Frequent recoveries, however, after these have appeared, prove the fallacy of that impression.

The pulse may remain natural, but in severe cases it sometimes increases to 140 or 150, and is quick and tense. The skin is dry, and becomes hot during the exacerbations of fever, but in the sudden and severe attacks it is cool on the trunk, while the extremities are cold, and more or less perfect collapse rapidly ensues.

The tongue is at first moist, coated with a whitish, yellowish or brownish-yellow fur. As the case advances, the tip and edges become red; subsequently the whole tongue becomes dry, smooth and polished. On account of this dryness of the mouth and fauces, the patient is almost constantly thrusting the hand far back in the mouth, as if to remove some irritating substance from this part.

The abdomen becomes tympanitic and tense, and if examined carefully, will be found tender. Emaciation makes its appearance early, and in severe cases, is rapid in the extreme. The duration of cholera infantum varies from 4 to 10 days, but may last for weeks, or even for months, from functional derangement of the bowels.

Diagnosis.—Cholera infantum may be confounded with tubercular meningitis, typhoid fever, and gelatinous softening of the stomach. From meningitis it may be distinguished by the torpor of the bowels, the pre-

dominance of the cerebral symptoms, the tossing of the head and rolling from side to side, the *peculiar cuf*, moaning and grating of the teeth, which characterize meningitis. It is only in the advanced stage of cholera infantum, that there is danger of confounding the two. From typhoid fever it may be distinguished by the absence of the lenticular spots, which appear from the 6th to the 12th day of typhoid fever, the prominence of the spleen, and the *continued* type of the fever.

Rillist and Barthez give us the characteristics of softening of the stomach, as follows: "If a child be taken suddenly ill, with obstinate vomitings which persist, with insatiable thirst, with pain in the abdomen, with abundant diarrhoea; if at the same time it emaciates with rapidity, whilst the gastric symptoms almost exclusively predominate, we may infer gelatinous softening of the stomach."

It will be inferred that a disease having such variety in its causes and violence should be met by a corresponding variety of treatment. Where there is good reason to suppose the irritation is kept up by improper ingesta, these should be evacuated. It is seldom, however, that we are called upon to effect this, for the vomiting and diarrhoea will have superseded the use of direct evacuants. When this is the case, the most soothing treatment should be adopted. The tinct. opii camphor, affords an excellent combination for this purpose, assisted with laudanum, or spts. camphor fomentations.

Should there be much irritation caused by the teeth, with restlessness, crying, and sudden startings, the bowels costive and relaxed by turns, which frequently precede an attack, much relief will be produced by scaring the gums, if it is done efficiently. Yet this little operation requires judgment and discrimination, or it may be performed, and we be disappointed, that no improvement follows.

When the brain is manifestly involved, we may do much to relieve the symptoms by applying cold to the head assiduously; the little patients many times bear this well, for the head is usually hot. Revulsives applied to the extremities, and sinapisms to the back of the neck, also assist materially. If coma or convulsions supervene, leeches should be applied behind the ears.

When there is severe gastric irritation, and most articles are ejected by the stomach, minute doses of calomel will sometimes succeed in allaying the symptoms almost entirely. The one-tenth or one-sixth of a grain may be given every hour or half hour. A good way to administer

this article, under these circumstances, is to rub it intimately with a little sugar of milk and sprinkle it in a dry state, well back on the tongue. When the thirst is troublesome, which at this stage is usually severe, I have found no better plan to alleviate the distress of the patient, than to place a small piece of ice in a single fold of soft linen, which is to be held in the mouth by the attendant. This may be continued indefinitely, without the fear of aggravating the symptoms. On the contrary, the little patient will very soon become quiet and fall into a refreshing sleep. The ice will cool the mouth and melt just fast enough to keep the tongue moist, and thus remove the sensation of unquenchable thirst. I have kept patients on this alone, for 12 hours and more, with the most happy results. No one who has once given this a trial, will fail to repeat it, when occasion for its use presents.

Dry cupping over the epigastrium will be found efficient in relieving the internal congestion, and allaying the violence of the symptoms.

It is of the greatest importance to establish a healthful and uniform action of the skin, for this purpose the warm bath will be used with pleasure, and benefit to the patient, and the action should be continued by wrapping in warm flannels immediately. Fomentations applied over the bowels, are of great service many times.

Astringents are strongly recommended by many ; but I must confess, I have seldom derived that benefit from their use, that I had been led to expect, if I except, perhaps, the chalk mixture with tinct. kino, when there was manifest acidity of the prima via present. Morphia, combined with the acet. of lead, is a favorite remedy with some, and given according to the following formula, I have seen it produce very happy effects. *R.* Morphia Acet., grs. ss., Plumb Acet., grs. iv., Aqua Destil, f. ℥ ij. ft. Solutio, *S.* Give a small teaspoonful for a dose, to a child one-and-a-half years of age, and repeat every second or third hour, until the discharges are controlled.

The extract of logwood, will sometimes produce beneficial effects in the advanced stage, by its tonic properties, as well as its astringency. In the advanced stage, also, nit. of silver is much used by some, and I have sometimes been highly pleased with its use.

After the violence of the symptoms has been subdued, much care and judgment are required to regulate the regimen properly, and thus prevent the strong tendency to relapse. The mildest farinaceous diet is all that is admissable in most cases, as rice gruel, sago, arrow-root, boiled biscuit

&c., &c., but some children do well on broth, of which chicken or mutton is preferable. With this diet wine may be given to some with advantage,—Port wine diluted, or wine whey.

This is but a hasty out-line of the course of, and treatment to be pursued, in cholera infantum. But, from the phraseology of the resolution, in obedience to which I write, I am prohibited from saying more; and from the importance of the subject I could not say less.

That I might embody in one place, what I had to offer upon that part of the subject, I have purposely deferred till now, my remarks

“UPON THE USE OF QUININE, IN THE TREATMENT OF CHOLERA INFANTUM.”

The almost uniformly intermittent character of the symptoms is a circumstance of practical importance, which affords indications of treatment in other diseases. And although this feature in the symptoms of cholera infantum, has been noticed and described by almost all writers upon the subject, still it does not seem to have had any part in furnishing the indications of treatment in this. We would naturally have expected, that when the *important symptoms* so uniformly correspond with those of other intermittent diseases, that the *efficient anti-periodic* remedy would at least have had a trial.

Besides, the intermittent character of the symptoms, there are other and important considerations, which indicate the use of quinine in this disease. It will be borne in mind that in the hasty review which we have just concluded, reference was made to the derangements of the liver and its function. This is what we should expect, when malaria has produced its peculiar influence upon the system. Headland has advanced the doctrine that in all cases where quinine is indicated, there is a failure in the secretion of healthy bile, and in all cases where there is this failure in the secretion of the bile, quinine is indicated. So there appears to be some connection between these conditions and the effects of quinine.

The bile is formed from the blood, the principal constituents of which are reabsorbed from the surface of the intestines, little more than the coloring matter being excreted from the system. One of these constituents, and a very important one, is *Taurine*. M. Liebig has pointed out an important similarity between taurine and the vegetable alkaloids. Of these, caffeine, the peculiar principle of coffee, is nearly analogous. From

the analysis of these two substances, this author has adduced the following formula:

Taurine, $C_4 H_7 NO_{10}$

Caffine, $C_8 HN_2 O_2$

He then shows that one atom of caffeine, if added to nine of water and nine of oxygen, will form two atoms of taurine; and it is not at all unreasonable to assume that such a change may, and usually does, take place in the system; and thus form a necessary element to the blood in health. This gives us the rationale of the effects of a strong decoction of coffee in the treatment of cholera infantum, as first recommended by Dewees, whose favorable opinion of its beneficial effects all experience sustains.

Taurine is soluble in water, and chrystalizable, is chemically analogous to the tonic bitter principles, and contains the same four elements as quinine. If necessary, this similarity could be exchanged for identity, and quinine could be changed into taurine in the blood. If there is one physiological process which is performed with greater facility in the system than any other, it is the process of oxydation; oxygen produces its effects through the external surface, it is admitted largely through the lungs, and it is received into the system with the ingesta. Now the formula for quinine is, C_{20}, H_{12}, NO_2 . Adding to this 45 atoms of oxygen, makes one atom of taurine, 16 of carbonic acid and 3 of water. This process it will be seen supplies an important material to the blood, and supports animal heat by giving off carbonic acid, exactly what is necessary in the treatment of cholera infantum.

From what has been said it will be seen that we regard cholera infantum as a Pyntic disease, as do the highest authorities upon the subject. We assume that it partakes of its intermittent type, in consequence of the influence of malaria upon the system. That, then, there is serious derangement of the hepatic function. That in some cases there is simple congestion of the mucous membrane of the stomach and bowels, such as frequently occurs in remittent fever. These circumstances force us to the conclusion that quinine is indicated in the treatment of this disease, and not merely for its tonic influence, but for its anti-periodic effect.

The proper period for administering quinine in the treatment of this disease, is a point of the greatest importance. Of course we could not expect to arrest the diseased action and remove the organic lesion which occur in the advanced stage by the use of Quinine, if given even in a

full anti-periodic dose. But to secure the full benefit of this remedy, it should be administered early in the disease, and it will be best tolerated if given during a remission as is the case with this remedy in remittents generally. The amount necessary to be administered must of course vary with the age of the patient, and to some extent with the violence of the attack. When given, a sufficient quantity should be administered in as short time as possible, in order to promptly arrest the periodicity, and it will be of importance to remember that quinine is best borne, when given in solution, and largely diluted. Should it not be retained in the stomach, we may secure quite as prompt and certain effects by using it endermically, or by enema. When administered in the latter mode, three times the quantity will be required that we would give by the mouth.

I will refer to three cases, out of a number that I might adduce, which were treated according to the plan indicated above, and the results warrant the inference that quinine will be found efficient in cholera infantum.

August 6th.—Visited the child of N— O—, aged 18 months. It had been affected with diarrhoea for the last three days. During the last 12 hours it had vomited frequently, a greenish watery discharge. Had great thirst, was almost constantly calling for drink, but could retain none on the stomach. Was restless, and had paroxysms of fever towards evening for the last two days. The eyes were sunken and the features were shrunk, but the head was unusually hot. I prescribed the following:

℞ Hyd. Prot. Chlor., grs. ij.
Sacch. Lactis, ji.

M. ft. Pulv. No. X., of which one was to be given every hour. Let the patient have ice in the mouth as constantly as it desires, secured by linen, and apply the spts. of camphor to the abdomen.

7th.—The vomiting and restlessness are less. The diarrhoea continues, but the quantity discharged is diminished. The fever appeared as usual towards evening, and was more severe than on the previous day. The thirst is not so troublesome. Prescribed the following ℞. Sulph. Quinine, grs. iv. ft. Pulv. No VI. S. Give one powder every 2nd hour, commencing when the fever subsides. Continue the ice while agreeable to the patient.

8th.—The quinine was commenced about 9 o'clock, last evening, and was retained, except the first powder, which was partly rejected by vom-

iting about half an hour after taking. All the symptoms are much relieved. The patient has improved in general appearance. The stomach more quiet, and the diarrhoea nearly controlled. The patient was left on the moderate use of rice water. After this date, the patient continued to improve; the functions of the stomach were restored without further treatment, and perfect recovery rapidly followed.

12th.—Was called to prescribe for the child of M— T—, aged one year. It had had diarrhoea for four days, the alvine evacuations have changed, successively, from the natural color and consistence, to green and watery. The vomiting was very severe, with great thirst. All the symptoms were much aggravated towards evening. Commenced treatment by the following *Rx*. Tict. opii. camph., gtts. iij, repeated every hour, till the anodyne effect becomes manifested. Apply to the abdomen the spts. camph., and use the ice.

13th.—The fever and other symptoms were aggravated towards evening. The irritation of the stomach somewhat relieved this morning. Prescribed the following:

Rx. Sulph. Quina, grs. ij.
Taurine, gij.
Acid Sulph. Arom, gtts. iij,
Ag. Cinnamon, ℥j.

Ft. M. et. S. Give a teaspoonful every second hour, and use the ice freely, and the fomentations of Spts. of Camphor, as before.

14th.—The symptoms are nearly controlled; direct the child to be kept perfectly quiet, and to receive its nourishment from the mother. The patient continued to improve rapidly till perfect health was restored.

I will refer to but one other case, in which the treatment was commenced with the use of quinine, and from the improvement in all the symptoms which immediately followed, and the rapid recovery manifestly induced by the quinine, I am led to believe that this remedy deserves a more extensive trial to test its virtues in arresting this disease by its anti-periodic influence.

15th.—A.—L—'s child aged 15 months, had been sick three days, with the usual symptoms of cholera infantum. The vomiting had continued for the last 20 hours. Directed the Spirits of Camph. to be applied to the abdomen, and the child to take $\frac{1}{2}$ grain of Quinine, in a decoction of coffee, every 2nd hour, till 3 grains are taken.

16th.—The child much improved in general appearance. The violence of the symptoms very much mitigated. I directed the Tinct. opii. camph. in quantities just sufficient to keep down all irritation, and the child to be fed sparingly. This was all the medical treatment the patient required.

SELECTIONS.

From the New York Medical Times.

Treatment of Rheumatism; with statistical results of twenty-five cases treated in the New York Hospital. By JOHN B. CHAPIN, M.D., Resident Physician.

THE treatment of rheumatism has, of late years, excited especial interest on account of the unsatisfactory results of the different modes heretofore pursued, and the dangerous complications attending the disease. It has been found that its duration has not been materially affected by the means used for its relief: and it has been a question with some, whether or not complications of the disease have not been promoted by the treatment pursued.

Dr. Fuller, in his recent work upon rheumatism, regards the pathology of the disease as depending upon the presence of a "*materies morbi*," which he supposes to be an excess of lactic acid, owing to defective assimilation, or suppressed perspiration. With the view to the neutralization and elimination of this acid, he recommends the free use of alkalies, by which means he "hopes the average duration of an attack may be reduced, from a month or six weeks, to ten days or a fortnight." Statistical tables must, in the present state of our knowledge, be relied upon to determine this result. During the attendance of Dr. Sweet at the New York Hospital, the present year, all the patients admitted with acute articular rheumatism were put upon the "alkaline treatment." The salt chosen for administration was the tartrate of soda and potassa, a neutral salt, possessing the property of rendering the urine alkaline.

The plan of treatment usually pursued was,—if the patient presented himself with unusual excitement of the skin and pulse, to administer a mixture of sulphate of magnesia and tartarized antimony until the skin was relaxed, and the pulse reduced to a more natural standard. The Rochelle salt was then directed in drachm doses, every two or three hours during the day time, till the urine was rendered alkaline, when it was gradually suspended. A lotion of carb. potass. $\frac{3}{4}$ j. with opium $\frac{3}{4}$ ij. to the pint of water, was directed as an external application. The administration of the salt was not attended with disagreeable consequences, with the exception occasionally of some ulceration about the fauces,—in no case was its action so severe upon the bowels as to require its entire suspension. The persons attacked were in the full vigor of health, and the character of the disease acute in its form. The frequency of administration of the remedy was governed very much by the reaction of the urine.

Table of Twenty-five cases of Rheumatism, treated at the New York Hospital, in March, April, May, and June, 1854.

	Date of admission.	Duration previous to admission.	Date of commencement of treatment.	Duration of treatment previous to urine becoming alk.	Commencing improvement.	Date of convalescence.	Number of days under treatment.	Whole duration of disease.	Complications.	Number of previous attacks.
1	March 28	5 days.	March 31	13 days.	April 13	April 20	20 days.	28 days.	Not any	First
2	" 24	5 "	" 31	20 "	" 15	" 23	23 "	35 "	Mitral Regur.	Second
3	April 8	14 "	April 11	3 "	" 20	" 25	14 "	31 "	Aortic Obstruct.	First
4	" 8	14 "	" 9	6 "	" 16	" 22	13 "	28 "	Not any	Second
5	" 11	7 "	" 12	3 "	" 17	" 20	8 "	16 "	"	First
6	" 11	5 "	" 12	8 "	" 20	" 22	10 "	15 "	"	Sixth
7	" 11	11 "	" 12	3 "	" 20	" 22	10 "	22 "	"	First
8	" 12	4 "	" 15	9 "	" 23	May 2	17 "	20 "	Aortic Obstruct.	Second
9	" 17	4 "	" 18	5 "	May 3	May 10	22 "	27 "	Not any	"
10	" 20	7 "	" 20	6 "	April 24	" 1	10 "	17 "	Aortic Obstruct.	First
11	" 22	28 "	" 24	2 "	" 25	" 1	7 "	35 "	Not any	Second
12	" 22	14 "	" 23	5 "	" 31	" 6	13 "	28 "	"	First
13	" 22	14 "	" 24	3 "	" 29	" 5	11 "	27 "	"	"
14	" 26	14 "	" 27	4 "	May 2	" 2	5 "	17 "	"	"
15	" 26	10 "	" 26	2 "	" 31	" 10	14 "	24 "	"	"
16	" 30	3 "	" 1	4 "	" 4	" 8	7 "	11 "	"	Second
17	May 1	3 "	May 2	6 "	" 6	" 10	8 "	13 "	"	"
18	" 1	3 "	" 2	3 "	" 5	" 7	7 "	12 "	"	"
19	" 3	2 "	" 4	8 "	" 20	June 1	28 "	30 "	"	First
20	" 13	7 "	" 15	3 "	" 22	May 23	8 "	17 "	"	"
21	" 16	7 "	" 17	4 "	" 24	June 1	15 "	23 "	"	"
22	" 17	6 "	" 19	4 "	" 24	May 30	11 "	19 "	"	"
23	" 23	6 "	" 23	4 "	" 25	" 30	6 "	13 "	"	"
24	June 1	10 "	June 1	7 "	June 10	June 14	14 "	24 "	"	Second
25	" 1	8 "	" 2	4 "	" 9	" 14	12 "	22 "	"	"

On the admission of the patient, the urine was tested, and in all cases, was found to be of acid reaction, and the secretion of the skin presented the usual acid odor. The treatment was generally commenced the second or third day after admission, and the urine was rendered of decided alkaline reaction in an average of five days after its commencement; the longest period it resisted the alkaline reaction having been twenty days, and the shortest two. The secretions of the skin have not, I believe, been noticed to alter. In one case, attended with profuse perspiration, which yielded readily to treatment, the colored shirt the patient wore entirely lost its color; and it was suggested whether the same change did not take place in the perspiration as in the urine. The average amount of the salt administered was from five to seven ounces.

The average date of commencing improvement was seven days after commencement of treatment, coinciding, in the large majority of the cases, with the commencing alkalinity of the urine. The improvement was invariably permanent, and after the urine was rendered alkaline, *no new articulations were affected*, as a general rule.

The average period of convalescence was twelve days after admission, and the whole duration of the disease, including the period previous to admission, was twenty-two days. Of thirty cases treated by Dr. Swett, during April and May 1853, during which time no uniform course of treatment was pursued, the average duration was five and a half weeks. One of the most gratifying results of the alkaline treatment was the diminished frequency of cardiac complications. Twenty-one of the twenty-five were free from any complication, three were *admitted* with aortic obstruction, and one with mitral regurgitation. Not one patient was attacked with any heart complication during the treatment of the disease. Comparing this result with the practice last year, it was found that four had mitral regurgitation, six aortic complication, and three suffered from pericarditis; thirteen in all, out of thirty.

In the present article, it was not intended to touch upon the relative merits of the variety of plans of treatment that have been suggested for this disease, but to present the *results* of the plan suggested by Dr. Fuller, as practised in this Hospital, which, it is believed, go far to sustain the confident predictions he has made of his favorite treatment.

From the North Western Medical and Surgical Journal.

Cause and Treatment of Prolapsus of the Rectum. By M. DUCHAUSSAY. (Archives Generales de Med., Sept.)

In a short but interesting memoir, M. Duchaussay reviews the circumstances attending this troublesome complaint, and fixes attention in particular upon the loss of power in the sphincter and muscle as the chief cause of the descent of the bowel. Moreover, he endeavors to show that

Dupuytren's operation, by excising the radiating folds of skin around the anus, and the operation by four touches with the actual cautery, practiced by Guersant, act not by causing any subsequent retraction of the cellular tissue, skin, and mucous membrane, but rather by stimulating the sphincter muscle so that it regains its contractility, and therefore its retentive character. How else, asks M. Duchaussay, do we explain the fact, that the prolapsus is often cured, or does it return after two days, or even after one day, or not at all after the operation? He points out the fact, that in cases of this disease in infants, three fingers may sometimes be introduced without causing contraction of the sphincter, before the operation by cautery, whilst afterwards, if one be passed, a powerful contraction of the sphincter immediately ensues. As proof that this recovery of contractile power by the sphincter is the cause of cure, a case is mentioned in which M. Guersant had used the cautery too superficially, the sphincter failed to contract, and the disease returned. A second cauterization was followed, on the contrary, by return of the muscular contractility, and the cure was complete.

According to the author, the cautery acts as a stimulant to the paralyzed muscle, just as it will to the deltoid in a like condition. After pointing out the inconveniences and apparent severity of M. Guersant's method, M. Duchaussay suggests that a slighter cautery, or some other stimulant to muscular contractility, might act as well, and he suggests strychnine. This, with M. Guersant's permission, has been tried in the Hospital des Enfants, in the case of a girl aged eleven years. The prolapsus here arise from obstinate constipation; it had lasted for four years: the bowel protruded at each evacuation about ten centimeters (—4 inches. During the first month of her admission she was treated by laxatives only, with no other result than that of diminishing the length of the protruded portion of bowel to about four centimeters ($1\frac{1}{2}$ inches.) Strychnia was then employed endermically near the region of the sphincter: the next day there was no evacuation; on the following day the bowels acted once, only a slight bulging of the rectum taking place; on the third day the protrusion was still less after an ordinary evacuation; and during the next thirteen days it did not occur again.

Blisters were made in the cleft between the nates, and on the right thigh close to that cleft; one sixth of a grain of strychnia was applied the first day, one-third on the second, and one-third on the fourth day. On the fifth day, about half a grain of sulphate of strychnia was used, and this was repeated for the last time on the sixth day. In the case of a boy, it is recommended to be applied between the scrotum and anus, immediately over the anterior interlacement of the sphincter ani fibres. The remedy certainly deserves further trial.

EDITORIAL.

Medical Department of the University of Michigan.

We were much surprised to notice in the August number of the *N. Y. Medical Gazette*, an editorial article accusing the Regents of the University of the grossest injustice towards Dr. Allen, declaring that he was removed from his professorship in the Medical Department by intrigue, to make room for a brother-in-law of one of their number. Comparisons were drawn between Dr. Allen and others, immensely to the advantage of Dr. A., and his great services to the Institution for the last *seven* years were spoken of in strong terms; the article closing with remarks similar to those which have appeared elsewhere, disparaging to the University.

The editors' attention has been called to the slanderous character of the article by a writer in the *N. Y. Times*, and by others, and it appears he has found himself imposed upon by a medical correspondent of his acquaintance in Michigan, whom he had supposed trustworthy; and after learning the facts from reliable sources, he has promptly made a recantation, in the September number of the *Gazette*, of all of his former article relating to the changes in the medical faculty, and, so far as this recantation relates to this faculty, and ourselves, personally, (and it is with a personal defence that we have at present to do) we give it an insertion below:

"UNIVERSITY OF MICHIGAN.

"Our article in the last number, on the subject of the recent change in the medical department of this school, was founded on a different state of facts from those which, we since learn, underlie the whole proceedings. We were misled by a newspaper sent us from Detroit, and a correspondent in Michigan, who complained of the flagrant wrong done to Professor Allen in the *precise terms we named*.¹ * * * * *

Since then, a candid and reliable friend at Ann Arbor has assured us that, so far as the changes in the Medical Faculty are concerned, they were necessary under existing circumstances, and no one has a right to complain. We should regret any disaster to this first great experiment

¹ The italics are our own.

at a free medical education, provided by the liberality of the State, and have heretofore taken frequent occasion to commend the example of Michigan in this respect. Thus far the school has done well in every aspect, and we wish it continued success."

We regret the course pursued by certain parties respecting the changes which have occurred in the medical department of the University, not so much on account of any momentary discredit which may be cast upon the Regents and the Institution by statements so easily shown to be false and puerile, as on account of the unpleasant feelings that are inevitably engendered; of the very disagreeable necessity in refuting the slanders, of bringing personal and private matters before the public; and, (if we may be allowed the profession of so much benevolence) on account of the suspicions which must be entertained as to the authorship of these statements, and the recoiling of the injury upon its suspected source.

After a degree of hesitation, and "in sorrow rather than anger," we give place to the following letter, which, though not intended for publication, we have obtained permission to use as we may deem necessary; and we would by no means obtrude this matter upon the medical public, had not one of the political papers of our own State given currency to these statements without recantation; and did we not fear that longer silence would be construed into an admission, of at least, the partial truth of the allegations.

After the charges of "nepotism" and "corruption" which have been so freely and groundlessly made, it is a matter of simple justice alike to the Regents and ourselves, that at least, this much of the truth should be made known. We give the letter entire, and it will sufficiently explain itself. Coming from one of the Regents, and from a gentleman whose integrity and honor we have never before heard questioned, it must settle the matter, and render any farther allusion to the subject in the *Journal*, unless farther attacks should be made, entirely unnecessary.

Tecumseh, Sept. 4, 1854.

A. B. PALMER, M. D.—*Dear Doctor*: I have been very busy with professional duties, or I would have answered your letter immediately on its receipt. You say that the *New York Medical Gazette* has published an article conveying the impression that Dr. Allen's removal was owing to a disposition to make room for a relative of one of the Regents. I have not seen the article, but regret to learn that so respectable authority should have been imposed upon by a statement as false as it is malicious. Whoever undertakes to make a statement for a public

journal on such a subject, must be presumed to know the facts; and if so, the *Gazette's* authority knows that the only relationship between you and myself (and to you and me the statement must refer) originated in your marriage with my wife's sister, which was speedily sundered, years since, by her early death. He knows that you were appointed Professor of Anatomy some two years since by the unanimous vote of the Board of Regents, which appointment was also unanimously sanctioned by the Medical Faculty, including Dr. Allen himself. He knows that the only reason why you have not been called to perform active duty in your Professorship, from the date of your election, was, in consequence of the inability of the Board to pay an additional Professor, and that by the large increase of the University Interest Fund during the past year, this inability did not exist at the date of his removal, and that, whether he was removed or not, you certainly would have been called upon to perform duty as a Professor in the Medical Department at next commencement, as Dr. Gunn distinctly informed the Regents that he could no longer perform the double duty imposed upon him with credit to himself, or full benefit to the students. Hence, the folly of the statement, that Dr. Allen was removed to make room for you. After Dr. Allen's removal, a Committee composed of the remaining acting Professors, viz.: Drs. Sager, Gunn, Denton and Douglass, with the President and two Regents, viz.: Dr. Upjohn and myself was appointed to fill the vacant Professorship and re-arrange the duties of the Professorships; and the same committee was authorized to notify you that your services would be required.

You know the rest—[What we farther know is that Dr. Palmer stated to the committee that he was comparatively indifferent as to the chair he should occupy—that he would submit entirely to the rest of the faculty, and that one of the number suggested in a written communication the division of labor which has been made, and that all present assented to it.—*Ens. Peninsular Journal.*] and I need not here state that the action of the committee in re-arranging the Professorships was unanimously approved by the Board. The *new* Professors appointed at the time were Drs. Ford and Andrews, and I am not aware that either of them are in any way related to either of the Regents. Far different views from those you say have been given in the Journal alluded to, governed the Board in the removal of Dr. Allen: and if the Board have heretofore refrained from publishing a particular statement of the circumstances which governed their action in his case, it has been in consequence of a desire on their part to injure him with the public as little as possible, consistent with their duty to the Institution. Several months before his removal, the Regents learned that there was perfect harmony among the Professors, with a single exception. They strongly recommended forbearance, but the evil continued, which induced them to address a note of inquiry to the President and Faculties; in answer to which, the following was received. Being recorded on the journal of the Board, it is public property, and you are as much entitled to it as others.

[Copy.]

The undersigned, Professors and Instructors in the University of Michigan, beg leave to express to the Hon. Board of Regents in answer to their inquiries, that they are deliberately of the opinion that the prosperity of the Medical College and the general welfare and harmony of the University are seriously affected by the connection of Dr. James A. Allen, with the Institution as a Professor.

Henry P. Tappan, President,

George P. Williams,
 Abram Sager,
 Silas H. Douglass,
 L. Fasquelle,
 Samuel Denton,

E. O. Haven,
 Edmund Andrews,
 Charles Fox,
 A. Winchell,
 Z. Pitcher,

J. R. Boise.

You here see the signatures of every resident member of both Faculties, with the exception of Dr. Allen, and of all the Professors, except Dr. Gunn and yourself, not resident at Ann Arbor.

I have not time, and I am not quite certain that I am at liberty to give you the details of a personal conversation between the resident Professors, above named, and the Board, relative to the cause for their emphatic expression against Dr. Allen. It is sufficient to say to you, that this interview having fully substantiated the information from different sources previously received, a majority of the Regents were deeply impressed with the belief that Dr. A.'s conduct, in several particulars, was highly objectionable, and that there was constant danger while he held a professorship in the Institution, of an open rupture between him and a majority of his colleagues, which would be alike discreditable and injurious to the University. You will thus understand, that, respecting a man who had made himself so obnoxious to those who have had ample opportunity of comprehending his character, and witnessing his conduct, as to call forth from a body of as high-minded and honorable gentlemen as can be found in any other university, a communication like the within, there may be seen, in the almost unanimous expression of his colleagues, sufficient ground for the action of the Regents, without attributing that action to motives as base as the heart of the man, whoever he may be, who dared to impose upon a respectable journal the slanderous statement that Dr. A. was removed to accommodate a relative of one of the Regents.

I write in haste, and perhaps loosely, but I trust have given you sufficient information to protect yourself from insult on this subject; as for the Board of Regents, they know how to defend their acts whenever they think proper to do so. Hoping you will pass through the cholera unscathed,

I remain,

Your friend,

M. A. PATTERSON.

In taking leave of this subject, and, as we hope, finally, we cannot refrain from again expressing our regret at the necessity which has compelled us to bring these personal matters before the public. We have not been precipitate, and have certainly exercised a large degree of forbearance. Four months have now elapsed since the effort was first made through the public press to create false and injurious impressions, under which we have so far rested in utter silence. Encouraged by this silence, an attempt has now been made to tamper with the respectable medical press of the country, and we could no longer refrain from doing this justice to ourselves and the position we occupy in the University of Michigan.

Respecting other charges which have been the burden of certain presses, we may possibly speak at another time; at present, as they refer to others rather than ourselves, we let them pass, though we might with the greatest ease show their falsity.

We have no special authority to speak at all for the University, but we presume to say that, while not disposed to shrink from any investigation of its affairs, it is desirous of peace and quiet, and wishes to be allowed, without molesting others, to work out what we fondly hope is its high destiny, in its own way. The Institution could not be more harmonious within itself than it is at present, and its aim will be to preserve peace and good will towards those without.

The American Medical Association, at its approaching session in Philadelphia, will be invoked to select a *permanent* place of meeting thereafter, and the Memphis Recorder proposes Washington City. The Boston Journal seconds the proposition, which will be likely to find general favor. Should the change be made, it is probable that the vexed question of printing the proceedings may be settled there, by inducing Congress to include the necessary expense in the appropriations made to the government printers, so that Uncle Sam may foot the bills.—*N. York Medical Gazette.*

Our eastern brethren upon the Atlantic border, are very prone to consider themselves as about the sum total of the American medical profession, and are apt to conclude that what pleases them, receives general favor. It should be remembered that there is a great and growing west, which cannot be ignored in the National Medical Association, or any other national organization, and we venture to predict that throughout

that west, the proposition to locate permanently the meetings of the Association at the extreme east, will receive very little favor. Indeed we object to its being permanently located anywhere for several reasons, viz :

One of the most pleasant circumstances incidentally connected with these meetings, has been that of members, particularly eastern members, getting out of their own circles, where they had for years been treading their narrow rounds, and having their imperfect ideas of our country corrected and enlarged, by personally seeing its different parts.

We also know men better by seeing them at their homes, and more kindly feelings are engendered and intimate relations established by enjoying their hospitality. These friendly relations existing between members of the profession in different parts of the nation, will contribute much towards preserving union and good will, and the exigencies of the future may require all such aids.

From the manner in which delegates are sent to the meetings of the Association, there will always be a larger proportion in attendance from the neighborhood where they are held; and if permanently located, the management and the honors of the Association will be likely to be monopolized by that neighborhood, and it will tend to dengerate into a mere local concern.

We hardly know whether the Gazette is serious about Uncle Sam's footing the bill. We see no sufficient reason for establishing a precedent of the kind, and we do not believe Congress will; and even if it were disposed to do so, we should be quite as well pleased by having the Association independent of government patronage. The Medical profession of the United States are able to foot their own bills.

If Congress or somebody else would pay the distant members liberal mileage fees and they were willing to receive them, the location of the place of meeting in a pecuniary point of view would be of less consequence; but where each member pays his own traveling expenses, the flagrant injustice of requiring all to go permanently to our extreme border of the country, is too apparent to require remark. We hope the medical press throughout the country, and particularly throughout the west, will protest against the proposed innovation.

Transactions of the Medical Association of Southern Central New York.

The physicians of that region seem to be men of the right stamp. They keep up a powerful organization, hold their regular meetings, and publish their proceedings in a handsome form. The last annual meeting was held at Homer, in June. The proceedings consist of some twenty papers, many of them of great value. One feature of their proceedings is specially worthy of notice. The opening session seems to have been designed both for the profession and for the public, and to have been well attended by both; and the President, Dr. Hyde, delivered an address, not only high-toned and able, but in a great part addressed to the lay portion of the audience, and calculated to show them the common interest which all the world together has in sustaining a sound and learned profession. The other documents were strictly scientific and show great industry on the part of the members of that body.

Epidemics.

We wish to call the attention of physicians to the following circular of the Committee on Epidemics, appointed by the American Medical Association. We hope that the profession will respond freely to them, as in that way only can they successfully perform the important task assigned them.

EPIDEMIC DISEASES OF OHIO, INDIANA, AND MICHIGAN.

At the late meeting of the American Medical Association, the undersigned was re-appointed chairman of a committee to report upon the Epidemic Diseases of Ohio, Indiana, and Michigan, at the next meeting of the Association, to be held in Philadelphia, in May next. In fulfilling the object enjoined upon the chairman, he has appointed N. Johnson, M. D., of Cambridge City, Indiana; Z. Pitcher, M. D., of Detroit, Michigan; S. M. Smith, M. D., of Columbus, Ohio; and J. Adams Allen, M. D., of Michigan, as members of the committee. It is desirable that as complete a report as possible be made, and the co-operation of the profession in these States, is therefore most earnestly requested. Information is especially desired on the following subjects:

Epidemic Cholera,
Cholera Infantum,
Diarrhoea,
Dysentery,
Erysipelas,
Intermittent and Remittent Fever,

Typus and Typhoid Fevers,
Hooping Cough,
Influenza,
Measles,
Scarlet Fever,
Small Pox, &c.

Any other form of disease appearing as an epidemic will be understood as being included along with the above.

The points of greatest interest to which attention is particularly invited are, causes giving rise to and favoring the propagation of diseases or checking their progress; Prophylactics; Influence of Age, Sex, and Nativity; Prominent Symptoms, Extent of Prevalence; Proportional Mortality; Post Mortem Appearances; Treatment; Duration of individual cases of disease; and any other points that may in any way bear upon the subject, such as Soil; Geological Formations (illustrated by a map when practicable); Natural Productions; Condition as to Improvements; Water; Meteorological Observations, &c.

It is preferred that reports be made to January 1st, including the previous year. If any remarkable visitation of diseases should have occurred previously to that time, an account of them will be acceptable, carefully designating the date of occurrence.

General Medical History, also of the *changes* which have occurred in particular districts in disease since the settlement of the country, will be gladly received.

It is desirable that all reports made to the committee may be forwarded so that they may be in the hands of the chairman by the 15th of January, 1855.

The chairman takes this method of thanking those physicians who sent him contributions for previous years, and hopes that they may repeat them for the present year.

It is hoped that this appeal to the profession will be responded to, and that every member will feel himself called upon to contribute something to the general fund of knowledge on these subjects.

Contributions may be sent to Geo. Mendenhall, M. D., Chairman, Cincinnati, Ohio; Z. Pitcher, M. D., Detroit, Michigan; N. Johnson, M. D., Cambridge City, Wayne Co., Indiana; S. M. Smith, M. D., Columbus, Ohio; J. Adams Allen, M. D., Ann Arbor, Michigan.

P. S.—The Committee would respectfully solicit the aid of County and other Medical Societies, which can be efficiently rendered by members making brief reports to the secretaries, who can condense them, and furnish the result to the committee. Especial attention is also requested to the furnishing of geological maps of counties and districts, when practicable.

Circular to the Physicians of Michigan.

We bespeak attention to the following circular of a committee of the National Medical Association.

The undersigned, having been appointed Chairman of a Committee of the Medical Association, to report at the next meeting on the subject of Dysentery, respectfully requests all physicians who may be in possession

of facts on the subject, to communicate with him by answering the following questions.

1. Has dysentery been common or rare in your vicinity?
2. At what seasons of the year has it occurred?
3. How much of it was epidemic, and how much sporadic?
4. What proportion of cases proved fatal?
5. What modes of treatment were adopted, and with what success?
6. Did it show any connection with other diseases, either by succeeding them, or running into them as they progressed.
7. Over how large a territory did it prevail? What was the face of the country, and the condition as to water, forests, malaria, etc.
8. In the epidemic cases, what was the condition of the atmosphere as to heat and humidity.

The undersigned would beg leave to state that one of the greatest obstacles in the way of the committee is the difficulty of collecting information. If every physician who sees this circular will drop a line stating what he knows on the subject of any of the above questions, the committee will be furnished with full materials for a report. Even information of a negative character, such as that no dysentery had been known in a particular section for a certain period, would be valuable in making up a report. It is hoped that full answers will reach us.

HENRY TAYLOR, M. D.,
Chairman of Committee on Dysentery.

Mt. Clemens, Mich., Sept. 1854.

Medical and Scientific Works.

As we are inquired of from time to time where various medical and scientific works can be obtained, we take this way of answering all querists at once. A. B. Wood & Co., of Ann Arbor, keep unquestionably the largest and best supply of medical and scientific books to be found in Mich. They attend to orders from all parts of the State, and if any rare work happens not to be on their shelves, they will procure it on short notice, if it is to be found in the United States.

Dissecting and surgical instruments are to be had at Maynard's, and also at Eberbach's, of good quality, and also on reasonable terms.

Announcement of the Medical Department of Pennsylvania College.

The session of this institution commences on the 9th of October. The college has been entirely re-organized on a respectable footing. Dr. Joseph Parrish, Editor of the *N. Y. Medical Reporter*, has been called to one of the chairs, which is a most judicious appointment.

Auscultation and Percussion. By SKODA.

This beautiful little work is published by Lindsay and Blackiston, Philadelphia; for an account of it, see Art. III.

Appointment.

We notice that S. B. Hunt, M. D., is appointed to the chair of Anatomy in the Buffalo Medical College. Prof. Hunt was for a considerable time Editor of the *Buffalo Medical Journal*, and has done good service to the profession both in scientific investigations, in defending its honor before the world, and in particular, in chastising the small-souled men who opposed the passage of the Anatomical Bill in the N. Y. Legislature.

MISCELLANEOUS.

Zoology.—It may not be known to many who interest themselves in Zoological studies, that many of the fresh water fishes of this region are unknown and undescribed in any book. Some professors of Michigan University, a few weeks since, caught several new species in an excursion of twenty miles. New species may be discovered in almost every stream and pond. Large numbers that are popularly classed off together as minnows, catfish, etc., etc., are on examination found to belong to different genera and species. It is found, too, that streams which terminate to the west, differ widely in their piscatory inhabitants from those that flow into the eastern waters. Every slope seems to have its own kinds, which to a considerable extent differ from those in the streams of other water-sheds in the same region.

A Probable Error in Diagnosis.—A physician in Illinois publishes in one of our exchanges an account of what he supposes to be a case of hermaphroditism. The penis is very short, the testes are evidently developed, and above the penis is a red "vascular tumour" *from the lower part of which the urine trickles by two small orifices*. The umbilical cord was attached just above this tumour. The testes are contained in two lateral folds which he takes to be the labia majora. He describes *no vagina*. Those who have examined this subject will readily recognize a tolerable description not of hermaphroditism, but of congenital absence of the anterior wall of the bladder and pelvis. Similar cases have been described in the eastern journals, and have exhibited themselves through the country. The "vascular tumour" is doubtless the remaining wall of the bladder, and the two orifices on it, the opening of the ureters. The physician proposes to castrate if the child lives sufficiently long. This will do no great harm as the genital organs in such cases are too small and deformed to be of any use; but it will do no good. Practitioners should be careful in the diagnosis of obscure malformations.

Solidification of Cod Liver Oil.—M. Stanislas Martin, pharmacist de Paris, gives the following process to make this oil palatable to patients: Cod liver oil, 125 grammes; spermaceti, 23 grammes, (in summer,) 20 grammes in winter; mix, heat over a sand bath, in a close vessel; pour into large mouth vessels, and allow it to cool without shaking. An aromatic essential oil may be added. Cod liver oil thus prepared looks like a jelly. Mix with unleavened bread, gum, liquorice, or flour wet with sugar water.—*Revue Therapeutique*.

The Hahneman Hospital.—This institution has ceased to exist: the furniture and effects were sold by auction, on the 14th inst., by Messrs. Debenham and Storr. It has scarcely carried on its miserable existence even for the time which we allotted it.—*London Lancet*.

Malformation.—A physician in the west part of the state describes a malformation of the thumb. The first phalanx is forked almost down to the base; the two branches standing at right angles to each other, and each bearing its own terminal phalanx and nail.

The legislature of New Jersey has abolished the laws protecting the people from the practices of quacks.

Hotel Doctors.—The *N. Y. Med. Gazette* complains that there is a class of quacks who attach themselves to hotels, and contrive various rascally means to catch and fleece travelers, and even use means to prevent them from sending for respectable practitioners.

Census Returns.—The census of 1850 gives in the United States, 40,564 Physicians, 191 Surgeons, 26,842 Clergymen, 23,939 Lawyers, 2,923 Dentists, 6,139 Druggists and 59 patent medicine makers.

New Diseases.—Dr. Cartwright's article, just republished in the *Ga Blister and Critic* describes several mental diseases of the negro, and among others spends several pages with the greatest gravity on "*Drapetomania* on the disease causing slaves to run away." He derives this learned name from the Greek words *Drapetes*, a runaway slave, and *mania*, madness. The cause of the disease is in his opinion, the want of good management by the master, and its "*diagnostic symptom, the absconding from service.*" The treatment he indicates as follows: "Before negroes run away, unless they are frightened or panic struck, they become sulky and dissatisfied. The cause of this sulkiness and dissatisfaction should be inquired into and removed, or they are apt to run away or fall into the negro consumption. When sulky and dissatisfied without cause, the experience of those on the line and elsewhere was decidedly in favor of whipping them out of it as a preventive measure against absconding or other bad conduct. It was called whipping the devil out of them."

Ox Gall.—The *N. H. Medical Journal* says that Ox Gall is a powerful remedy to check obstinate vomiting.

Amputation at the Ankle Joint.—Prof. Pirozof of St. Petersburg proposes in this operation to leave the posterior part of the os calcis in the flap.

To remove Nitrate of Silver stains, take 1 drachm of cyanuret of potash to 1 ounce of water and wet the spots. They will be removed in a few minutes by this solution.—*Nashville Journal*.

New Remedy for Tape-worm.—*Tannic Acid.*—Prof. Osborne, of Ireland, recommends Tannic Acid for tape-worm, on account of its known action on albumen and gelatine, he has seen them curled, and contracted and broken down where expelled after this remedy.

Return of Prof. Fasquelle.—Prof. Fasquelle, of Michigan University has just returned from a visit to his native country, France.

THE
PENINSULAR
JOURNAL OF MEDICINE
AND THE COLLATERAL SCIENCES.

VOL. II.

NOVEMBER, 1854.

NO. V.

ORIGINAL COMMUNICATIONS.

ART. I.—*Case of Wound of the Scalp, Division of the Skull, and deep Injury of the Brain. Apparent complete recovery.* By A. B. PALMER, M.D., &c., Chicago.

June 3d, 1854, was called about 8 o'clock in the evening by direction of Deputy Sheriff Pinkerton, to see Mr. E. A——, aged 35, keeper of a Hat and Cap Store, a man of moderate size and flesh, of a nervous sanguine temperament and regular habits, reported to have been way-laid and struck down and probably murdered in the street.

Found him at his own house, where he had been carried some few rods, sitting in a chair, supported by several persons, with a deep gash upon the left side of the head from which blood was issuing pretty freely.

On examination of the wound, it was found to have been made with a sharp instrument (a common hatchet) about two and one-half or three inches in width, and by a strong blow made in a slightly oblique direction from behind forwards, dividing the scalp and separating the skull in the region, and nearly in the direction of the coronal suture, elevating to the extent of the thickness of the hatchet, or chipping up as it were, the skull anterior to the injury—the wound extending for an inch at least, in depth, and the whole breadth of the hatchet in length, into the lobe of the brain. On coughing, the blood gushed up from the whole

extent of the wounded brain, and a piece or two of this brain as large as a horse-bean slipped out in one of those acts of coughing.

The patient though faint and depressed from the shock and loss of blood, was in perfect possession of his senses and intellect, and as he was thought to be in danger of dying or becoming speedily deprived of his intellect, he answered questions, and gave a full and correct account of the person inflicting the blow, and the manner in which it was done.

After the wound was examined by Drs. Miller and Bassett, and they were satisfied of its character and extent, the surrounding parts were shaved, the divided scalp brought together by adhesive straps, the lower angle being left free for the discharge of matter, and the skull left slightly elevated as it was found, lest pressure on the brain should occur.

Cold water dressings were faithfully applied, the patient was kept entirely quiet with his head elevated—and he was put upon a gruel diet, (after a few days changed to bread and water)—and a cooling drink of Bistartrate of Potash to keep the bowels soluble was prescribed.

The next day the pulse being moderately excited, accompanied with a feeling of fullness and slight confusion in the head, a moderate dose of sulph. magnesia was given, after the operation of which the pulse was natural and the sensations of the patient scarcely varying from the normal condition. He was carefully watched, the cold water constantly applied, the saline laxative two or three times repeated at intervals of as many days, and the cream tartar water given during the intervals. The wound was occasionally dressed, which healed kindly with some slight granulations, and without a symptom, mental or corporeal, other than those mentioned occurring; the only difficulty in his management being in keeping him quiet; he was dismissed on the 23d of June, twenty days from the receipt of the injury, apparently perfectly well.

The point of interest in this case is the almost entire absence of symptoms from so extensive a wound of an organ so important as the brain.

The treatment was directed solely to the prevention of inflammation; and the allowing the slightly elevated fragment of skull to remain in that position was deemed advisable to allow the escape of matter and avoid danger of compression of the brain.

Though not belonging to the surgery of the case, it may satisfy curiosity to mention that the blow was inflicted to gratify revenge, and the subject matter of difference was a woman. The would-be murderer is in the State's Prison.

ART II.—*Silex in the Urine.* By X.

Having been called in consultation to a patient living in Jackson Co., I found him laboring under some derangement of the urinary function. The attending physician had sounded him and discovered a calculus. As the irritation was not very great, the man refused to submit to an operation for its removal. We determined to submit the urine to a brief analysis with the view of determining the kind of deposit which was going on, and if possible counteract it by suitable remedies, and thus prevent the further growth of the stone. We retired to our lodgings, and on the following morning, the patient sent us at our request a bottle of his urine, and also in a vial a sediment which subsided from it on standing in a vessel. This sediment we proceeded to examine. It was in small grains like a very fine sand, of a grayish dirty white color, exactly like many calculi. Under the microscope there was no crystalline structure visible.

We then proceeded to apply successively to portions of it sulphuric hydrochloric nitric, and acetic acids, ammonia, and solution of caustic potassa. It was all in vain, the sediment remained at the bottom of the test glasses almost entirely unchanged. There seemed to be a very slight diminution of bulk, but it was scarcely perceptible. We tried the heat of the spirit lamp upon the test glasses and their contents, and continued many hours perseveringly endeavoring to effect at last a partial solution, but to no purpose whatever. The experiments might as well have been tried on pounded glass. We next tested the fluid in the glasses, to see if there was anything in solution. We obtained a very scanty sprinkling of crystals of oxalate of lime, together with chloride of sodium and muriate of ammonia. The oxalate was doubtless obtained from the sediment; the chloride of sodium must have been formed by the combination of the hydrochloric acid of the test with some salt of soda in the sediment under examination. Both these kinds of crystals were scanty. The muriate of ammonia was evidently the result of combination among the tests employed. It did not occur when some other acid was substituted for hydrochloric. The great mass of the sediment remained without change.

It seemed that such obstinate resistance to the action of all ordinary solvents could only be the property of silica, and yet silica is described as being such a rare and scanty urinary deposit that it appeared nonsensical

to test for it; however, we rubbed a portion of the sand between two pieces of glass, and on examination found that *the glass was distinctly scratched*. Thus encouraged we proceeded. We mixed a quantity of it with several times its weight of carbonate of potassa, and by the blow-pipe melted the whole into a white enamel. This we dissolved without difficulty in a small quantity of water. On the addition of hydrochloric acid, a copious flocculent precipitate of silica subsided.

At this conclusion of the matter we stared at each other in a kind of stupid wonder. My friend suggested that if the man's calculus was like the sand in his urine, it could be nothing else than a flint-stone, and ought to be got out to be used for gun flints. I declared that the man must have fooled us, and sent us a bottle of urine and sand for the express purpose of seeing what a fuss a council of learned doctors could make over a little common mud. To satisfy ourselves we examined it under a compound microscope of great power, and compared it with the grains of sand in common earth. It was of no use; there was no resemblance; the sedimentary particles had not the crystalline translucency of the particles of sand found in common earth; but on the contrary, were perfectly opaque, and of a dull, dirty white color. We next examined the gritty particles found in ashes, but with no better success. They bore no resemblance to the substance we were analyzing. In fine, the council was confounded. If that sediment ever came from the man at all, then unquestionably he was voiding silicic acid in considerable quantities, and my friend who had charge of the patient, waggishly desired to know what was the authorized treatment to counteract *the silicic acid diathesis*. A third physician present was of the opinion that there was an attempt to dupe us, and that the substance in question was the dust of an old clay tobacco pipe pounded up. Unfortunately we were none of us posted up sufficiently in chemistry to say at the moment whether there was enough silica in pipe-clay to give the reactions we had observed, or not; or indeed, whether the alumina in it might not give a precipitate that we should mistake for silica; and the patience of the council was so much exhausted that it broke up without putting the matter to an experimental test. I am not certain, Messrs Editors, whether such a "*know nothing*" result as this is worth recording, but perhaps the case may be instructive in warning practitioners in all analysis to make sure of the authenticity of the article to be examined. As it was we were vexed and puzzled, because we could not tell whether we had an extraordinary

case of *calculus*, or of *deception*. (The patient was too respectable to make it proper to question his veracity to his face.) We could only laugh uproarously at each others' long faces and knotted brows, and wend our ways homeward.

ART. III.—*Auscultation and Percussion*. By Dr. JOSEPH SKODA, (of Vienna,) Translated from the Fourth Edition, by W. O. MARKHAM, M.D., Assistant Physician to Saint Mary's Hospital. Published by Lindsay and Blakiston, Philadelphia, 1854.

(Continued from page 166).

We would call attention to the first division of sounds, viz: "*full* and *empty*," as being badly adapted to English usage. What the limits of usage may be to the German words thus translated we do not know, not being critically acquainted with that language, but in English the terms are but half justifiable and the translator would have done well had he selected some other. The word "*full*" is very commonly applied to sounds by musicians, and indicates that peculiar indescribable quality which without necessarily being loud, yet impresses the hearer with the idea of a great capacity of producing sound; it is heard wherever the sonorous body presents a large vibrating surface to the air, as in the drum, large bells, pedal pipes of the organ, and double bass viol. This is the "*full*" tone of the English language, and so far Dr. Skoda's term, or his translator's is correct, for he applies it to the sounds made by percussing, over places where large portions of air resound, but although this kind of sound is said sometimes to be "*full*" yet its opposite is never called "*empty*." Musicians invariably speak of the latter as "*slender*" tones, but never as "*empty*" and the usage of writers corresponds with them. The sound is heard wherever the vibrating surface is small, as in the Æolian string, in small bells, in piccolo flutes and in percussion over small cavities. Were it a mere matter of choice of words, we should care nothing about it, but in instructing students, if one speaks of eliciting an "*empty sound*" by percussion, they will by common usage immediately think of it as a sound elicited from a considerable "*empty*" cavity, and if the full sound be spoken of in contrast, it will be understood as proceeding from some place more or less filled up with solids or fluids, whereas the fact is, Dr. Skoda's "*full*" sounds come from the emptiest cavities, and his "*empty*" sounds from the full, or at least from the small ones.

In the third chapter the author proceeds to treat of the auscultation of the voice, and he has some peculiar ideas respecting the causes of pectoriloquy. It is his opinion that increased solidity of the lung may increase the pectoral resonance of the voice, but not by means of the conducting power of the tissue as Lænnec supposed. We do not entirely agree with him here, but his argument is worthy of attention and is one of the most splendid specimens of physico-vital reason which we have ever seen; it rings in the soul like music.

"Variations in the Strength and Clearness of the Thoracic Voice cannot be explained by the Laws of Conduction of Sound."—Lænnec attributed the variations observed in the strength and clearness of the thoracic voice to changes in the sound-conducting power of the lung parenchyma; he considered the lung in its normal state, to be a bad conductor of sound, but that its conducting power was increased by its consolidation and infiltration, or by the presence of fluids in the pleura—an explanation quite in accordance with the generally received opinion, that solid bodies conduct sound better than air.

"This opinion has prevailed in France up to the present time.

"Now, if we repeatedly auscultate the thorax of a person suffering from hepatization of a lung, we shall find that the thoracic voice is at one time increased, and at another diminished in force, without any alteration—discoverable by percussion or other means—having taken place in the condition of the hepatized part. This alternate presence and absence of the thoracic voice at the same part of the thorax, when the lung is hepatized, is a well-known and common occurrence. Every one who has had much experience in the auscultation of pneumonia, must have observed the increased voice, bronchophony, to appear and disappear several times in the course of a few minutes.

"The phenomenon is opposed to the idea of the bronchophony depending upon a superior conducting power of sound, inherent in hepatized lung; and whoever maintains the correctness of such an idea, is bound to explain this anomaly.

"The voice, as we all know, though it may have disappeared, will return after a deep drawn breath, and still more readily if the patient coughs; and it will again disappear if we remain tranquil for a short time, without coughing or expectorating. The conclusion to be drawn from this is, that the voice is heard through the hepatized parts, when the bronchial tubes passing into them are not obliterated by fluids, but contain air; and that on the other hand, it disappears when the tubes are blocked up by mucus, etc. This explanation of the absence and presence of the thoracic voice, in no way removes the difficulty as to the increased sound conducting power of the hepatized lung; if this power were really increased, it would become a matter of indifference whether the bronchial tubes contained air or fluids.

It also appears doubtful—as in the case of hepatization of the lung—whether an increase in the sound-conducting power of the lung takes place

in the course of pleuritic effusions; for the voice becomes weaker in proportion as the effusion progresses, the reverse of which ought to happen, if the effusion were a better conductor of sound.

"The following remarks on the sound-conducting power of bodies and its conditions, do not justify the supposition that bronchophony depends upon an increased sound-conducting power of the hepatized lung and of fluids. The human voice, and every other sound which is formed or propagated in the air, is heard furthest in the air. A sound excited in the air, is heard very indistinctly, or not at all, by a person under water; and a sound in one room passes with difficulty into another, being interrupted by the walls. Any one wishing to weaken his hearing, stops his ears.

"On the other hand, the slightest scratching at one end of a long rod, may be heard, if the ear be brought in contact with the other; while no sound whatever is audible in the air, although the ear be brought much nearer to that end of the rod whence the sound proceeds. The sound caused by striking two stones together, under water, is distinctly heard there, and even causes a disagreeable sensation; whilst, out of the water, it can scarcely be recognized.

"These facts show that sound does not pass readily from dense bodies into the air, or from the air into dense bodies. Physics also, teach us that sound is always reflected, in passing from one medium into another, and that less sound enters into the new medium than would have been propagated through a corresponding space of the one in which it was originally excited; the more dissimilar the media are, in respect of density and cohesion, the greater is the reflection of the sound, and the less freely does it pass from the one into the other.

"The ticking of a watch is heard to a greater distance through a rod, than through the air, because no part of the sound passes off from the rod into the surrounding air, but remains wholly concentrated in it; the sound, on the contrary, which passes immediately from the watch into the air, spreads out in every direction, and thus impinges upon a greater extent of matter. The experiment with the rod, however, does not prove that wood is a better conductor of sound than air. The difference in the conducting power of air, wood, and other bodies, has not been experimentally determined. Researches made for this purpose must be of such a nature as to show the results of one and the same sound in two or more media, which have like form and volume, and are placed in a similar relation to the parts surrounding them; the distances at which the sounds are heard through each medium, and their force, must also be compared.

"Let any one, for example, so place the end of a wooden tube on a watch, that the whole rim may be in contact with it, and then listen at the other end; he will hear the ticking at the same moment through the wood, and through the air in the tube. If a solid cylinder of wood be now fitted into the tube, and it be placed as before, the ticking will be heard passing through the wood of the tube, and through that of the solid cylinder. Now, if wood were a better conductor of sound than air, the ticking ought to be heard more clearly in the latter than in the form-

er case; but any one may readily convince himself that the reverse of this is the fact.

"It is a remarkable circumstance, that auscultators should make use of a hollow tube and not of a solid cylinder, and yet assert that dense bodies are better conductors of sound than air.

"There is no doubt that the voice passes into the parenchyma of the lungs through the medium of the air contained in the trachea and bronchial tubes; for if it were propagated along the walls of the trachea, it would spread equally well through the general coverings over the thorax. When the lungs are healthy, and the air passes uninterruptedly into the air-cells, the voice reaches further than when the lung is hepatized, or compressed by fluids, that is, than when the air-cells and finer bronchial tubes contain no air. The more solid a body is, the more difficult is the passage of sound from the air into it; and hence sound passes more readily from the air of the air cells and bronchial tubes into the parenchyma of a healthy lung than it does from the air of the larger bronchial tubes into the consolidated tissue of a hepatized lung.

"The conducting power of healthy and of hepatized lung, and of fluids, may be readily shown in the following manner. Let one person direct his voice into a stethoscope placed upon a healthy lung, removed from the body, while another auscultates with a second stethoscope; by gradually placing the stethoscopes at different distances, the exact distance through which the voice can be heard in the lung, will be at last ascertained; similar experiments may be afterwards performed with hepatized lung, and lung compressed by fluids.

"Repeated experiments of this nature have invariably demonstrated to me that sound is heard somewhat further through healthy than through hepatized lung. The difference in this respect is remarkable.

"In accordance with the above facts, I have come to the conclusion that variations in the strength and clearness of the thoracic voice, cannot be explained by differences in the sound-conducting power of normal and abnormal parenchyma.

"*The Variations in strength and clearness of the Thoracic Voice explained by the laws of Consonance.* If a sound is heard as distinctly at a distance from, as at the spot where it originates, one of these two things must have happened; either its diffusion has been prevented, and it has remained concentrated in the passage, or it has been reproduced by consonance, and thus increased in strength; and if the sound be heard louder at a distance from, than at its origin, it must also have gained increase by consonance.

"Consonance is a well known phenomenon. A guitar string yields a musical note, when a similar note is sounded upon another instrument in its neighborhood, or even by the human voice. A tuning fork held in the air sounds much more feebly than when laid on a table; the table strengthens the tone, and yields similar vibrations, and thus consonates with the tuning fork.

"The sound of a jew's harp is scarcely heard in the open air, but be-

comes distinctly audible when made to vibrate within the mouth—its sound is strengthened, in consequence of the air in the mouth consonating with its vibrations.

“When, as occasionally happens, the voice is heard louder at some part of the thorax than over the larynx, it must have derived its increased strength from consonance within the thorax. Variations in the strength and clearness of the thoracic voice may thus be explained by changes in the force of its consonance within the thorax; and it therefore becomes necessary for us to inquire here, what parts within the thorax consonate with the voice, and what circumstances cause variations in the consonance?

“The voice, as it proceeds from the mouth, is formed of the original sounds of the larynx, and of the consonant sounds of the throat and of the cavities of the mouth and nose. This we learn from the changes which the voice undergoes by opening and closing the mouth or the nose, while the condition of the larynx, remains unaltered. It is well known that the pitch of the voice is determined by the larynx, and that it is not affected by the opening or closing of the mouth or nose; but the articulation of the voice takes place in the mouth, and certain modifications in its timbre depend upon the form and size of the mouth and nasal cavities, and particularly upon the circumstance of their being opened or closed.

“Now, since it is evident that the air in the throat, the mouth, and the nasal cavities, consonates with the sound formed in the larynx, we cannot doubt that the air in the trachea, the bronchial tubes, etc., may likewise become consonant with sounds originating in the larynx. The air in the thorax, and not the parenchyma of the lungs, in the consonating body; the parenchyma is ill adapted for consonance, being neither firm nor tense in structure.

“Those bodies in which musical vibrations are most readily excited, such as the air, musical chords, membranes, bars, plates, etc., also consonate most readily.

“Air only consonates when confined in a given space. The human voice, and every other sound, is much weaker in the open air than in a room. The air contained within the sounding board of a guitar, a violin, or a clavier, consonates with the tones produced by their strings, but the free air around does not strengthen their tones.

“The force of the consonance depends upon the form and size of the enclosed space, and upon the nature of the walls forming it; the consonance, for example, is stronger, the more completely the sound is reflected by the walls; hence a space bounded by solid walls yields the loudest consonance, whilst those formed of linen, as in a tent, add little to the force of the sound. The cause of the increase of sound in a speaking trumpet is well known.

“The air enclosed in a given space does not consonate with every sound; and although several sounds or murmurs may consonate therein, it will be found that they do not do so with equal force and clearness. Consonating bodies only respond to those tones which they themselves are able to produce, or to vibrations forming some aliquot part of such tones.

"The following conclusions respecting the consonance of the thoracic voice, may be drawn from a consideration of these physical data; the air contained in the trachea and bronchial tubes consonates with the voice in so far as the walls confining it, have, in respect of their power of reflecting sound, a similar or analogous condition to the walls of the larynx, of the mouth, and of the nasal cavities. In the trachea, the walls of which are formed of cartilaginous rings, the consonance of the voice is nearly as forcible as the voice itself, heard in the larynx; and it can be little less so in the right and left bronchi.

"As the bronchial tubes pass into the parenchyma of the lungs, their cartilaginous rings gradually disappear, the cartilaginous structure existing at last only as irregular thin plates, lying in a fibrous tissue; the finer divisions of the bronchial tubes are merely thin membranous canals. The consonance of the voice is consequently much feebler in the bronchial tubes, which run into the parenchyma of the lungs, than in the trachea, and, in fact, becomes weaker in proportion as the amount of cartilaginous structure diminishes.

"The conditions requisite for the production of increased consonance of the voice in the bronchial tubes, which run into the parenchyma of the lungs, are these; either, the walls of the tubes must be cartilaginous, or if membranous, the membrane must be very dense, or the tissue of the lung around the tubes must be deprived of air; in any of these cases, the walls of the bronchial tubes will reflect sound more strongly, than in their normal condition. Of course the communication between the air of the tubes, and the air in the larynx, must remain uninterrupted.

"It frequently happens, when musical vibrations—original or communicated—are excited in air in a confined space, that the walls themselves which surround the air also vibrate in unison, and the more readily, the less rigid and unyielding they are. An organ pipe vibrates when the air within it sounds, and so does a speaking trumpet. The trachea vibrates with every sound, and its vibrations are perceptible, even through several inches of firm fleshy layers. The walls of the bronchial tubes, running into the parenchyma of the lungs, likewise vibrate, when the voice consonates in them, just as the walls of the larynx do; the vibrations thus excited may extend to the walls of the thorax, and even pass through several inches of thick fleshy parts, or of fluid, and be heard at the thorax as consonating sounds of the bronchial tubes.

"Diseased Conditions of the Respiratory Organs, which, in accordance with the preceding explanations, will produce an increase in the Strength or Clearness of the Thoracic Voice."

Among these may be classed:

"1. All those diseases by which the parenchyma of the lungs is deprived of air, and rendered firm, dense, and solid. The walls of the bronchial tube, surrounded by such an abnormal parenchyma, reflect sound as well or even better, than the wall of the trachea. And the reflection of the sound, and the force of its consonance, is greater or less, in proportion to the density of the parenchyma.

"The diseases which render the lung-parenchyma solid, are; pneumo-

nia, tubercular infiltration, or pulmonary apoplexy—apoplexia pulmonum. In these diseases, no increase of the thoracic voice will occur, unless the air has been wholly expelled—or apparently so—from the air-cells, by the infiltrated matters; and the solidified portion of the lung be of such a size as to contain at least one of the larger bronchial tubes, having air in it, and communicating freely with the larynx. The more extensively the lung is solidified, the more marked is the increase of the strength of the thoracic voice.

Pneumonia in its first stage, inflammation confined to a few lobules of the lung—lobular hepatization—œdema of the lungs, or limited effusion of blood into the lung parenchyma, produce very slight, or no increase what ever, in the strength of the thoracic voice; neither do solitary tubercles, however numerous, provided the intervening parenchyma remains pervious to air. Effusion of blood into the lung parenchyma—Lænnec's pulmonary apoplexy—being of rare occurrence, and generally very limited in extent, seldom gives rise to increase of the thoracic voice. Its increase is very frequently observed in the course of extensive hepatizations and tubercular infiltrations of the lungs. It is also produced by the condensation of the lung, which remains after an unresolved hepatization, just as in hepatization itself. I have never found the lung substance completely deprived of air, in œdema of the lungs, unless the lung was, at the same time, subjected to external pressure.*

“III. THICKENING AND ENLARGEMENT (HYPERTROPHY) OF THE CARTILAGES OF THE BRONCHIAL TUBES WITHIN THE LUNGS.

“The chief reason why the thoracic voice is generally louder in old than in young persons, is, that in the former, the bronchial cartilages are increased in size and density. Disease may render them larger and denser than natural, both in the old and the young; but such degeneration of the cartilage (which is always accompanied by an increased, and generally purulent, secretion from the bronchial mucous membrane) is not of common occurrence, and rarely proceeds so far as to produce an increase of the thoracic voice.

“Cavities in the substance of the lungs, and enlargements of the bronchial tubes—a bronchial tube may be uniformly enlarged through the whole length of it, or its enlargement may be partial, and of a sacculated form)—do not produce increase of the thoracic voice, unless their walls reflect sound, and are infiltrated, thickened, and deprived of air, through a depth of at least several lines. A cavity or enlarged bronchial tube, surrounded by parenchyma containing air, never gives rise to increase of the thoracic voice.

* According to Dr. C. J. B. Williams, Raciborsky, and some other authors, bronchophony may be produced by congestion of the pulmonary vessels. Now this congestion exists, in a high degree, when the mitral orifice of the heart is contracted; consequently, such contraction should always give rise to bronchophony. Congestion of the pulmonary vessels does not cause bronchophony and, most assuredly does not alter the resonance of the voice.

“Experiments in support of the considerations offered above, respecting the causes of the variations which occur in the strength and clearness of the Thoracic Voice.

“We may experiment by directing the voice into a wooden tube, fixed after death into the trachea of a person whose lung is hepatized, infiltrated with tubercle, or contains cavities: for this purpose, the lungs may be either left in the thorax, or removed entire, with the trachea and the larynx: it very seldom happens, however, that we hear the voice over the diseased parts the same as during life. In these experiments, the voice generally appears clearer in the healthy, than in the diseased parts of the lungs; and when they are taken out of the body, we find that the strength of the voice, in the normal portion of the lung, resembles pretty closely the strength of the voice, as observed during life, at those parts of the thorax beneath which the abnormal lung was situated. The results obtained are not more satisfactory, if, instead of speaking into the larynx through a tube, we produce a sound analogous to the human voice, by blowing into the larynx through the narrowed glottis. These facts may be explained by the circumstance that, after death, fluid is almost invariably present in the bronchial tubes, the communication between the deeper bronchial tubes, or between cavities and the larynx, being generally either partially or completely interrupted by the presence of mucus, blood, serum, etc. For this reason, we are not able to obtain satisfactory results from experiments with the lungs; and it is very difficult and tedious, generally indeed impracticable, to withdraw the fluid from the bronchial tubes.

“But there are other methods, by which the nature of the modifications of the thoracic voice, as they occur in the healthy and diseased conditions of the lungs, can be more readily determined. The coats of the small intestines may be considered, in respect of their power of reflecting sound, to have an analogous character to the membranous parts of the bronchial tubes; and the liver, and the substance of the heart, to resemble in a similar respect hepatized lung.

“Now, if a person speaks through a stethoscope placed upon one end of a portion of intestine, moderately filled with air, the voice will be heard consonating in the air of the intestine, through a stethoscope placed upon the other end; but the force of the consonance will diminish, if its coats be much distended. If, instead of placing the stethoscope immediately upon the intestine, the auscultation be performed through the medium of a portion of liver, of lung, or of intestine filled with water, the consonance will cease, or be very indistinctly heard, even though the medium employed be not more than half an inch thick, and merely large enough to close the mouth of the stethoscope.

“Again, let a canal be bored along the substance of a liver, but not so as to perforate it, and then a person speak into the canal through a tube, so placed over its opening as to close it accurately; it will be found that the voice can be heard along the whole length of the canal, and to a certain distance on either side of it, considerably louder than if the person spoke through the open air; and the voice will still be heard along the

course of the artificial canal, although the auscultation be performed through the medium of hepatic or pulmonary tissue several inches thick, or through bone or cartilage; it becomes weaker, however, as the thickness of the medium is increased, and at last altogether ceases.

"If the liver be submerged in water, and care taken to prevent the entrance of the water into the artificial opening, the voice may be heard even through a layer of one or two inches of water.

"This experiment is more readily performed with the heart than the liver. For this purpose, the left ventricle is emptied of blood, the left auricle closed, and the aortic valves destroyed; if the voice of a person is now directed into a tube fixed in the aorta, it will be heard consonating in its cavity, through a stethoscope placed over the left ventricle; the auscultation may be practised at pleasure, through the medium of lung or liver substance, as well as under water.

"The same phenomena are also observed, when the larynx, together with the trachea and the two bronchi (which last must be closed,) are taken out of the body, and a person speaks through a tube fixed in the larynx.

"Again, let a portion of intestine, filled with air, be fixed under water, and two stethoscopes placed upon it, at a moderate distance from each other, (care being taken that no water passes into them, which is easily managed,) and then let a person speak into one of them, while the ear of the observer is applied to the other, and it will be found that the consonance of the voice in the intestine is much louder than when the experiment is performed out of water; and that the force of the consonance is immediately diminished, if a portion of the intestine be allowed to project above the surface of the water.

"These experiments seem to me to indicate pretty clearly the relation in which the increased thoracic voice stands to the different conditions of the lungs. If the consonance of the voice in the intestine, when this is not placed under water, be so feeble as to become inaudible through a medium of lung, liver or fluid, half an inch to an inch in thickness, it seems probable that the voice in the membranous bronchial tubes will likewise be so feeble, as to become either very indistinct, or altogether inaudible, over the thorax. And again, just as the voice consonates forcibly along the artificial canal formed in the liver, in the ventricle of the heart, and in the trachea, so will it consonate forcibly in the bronchial tubes of a hepatized lung, or in the cavity of a lung infiltrated with tubercle, and appear louder at the thorax, than the voice which passes through the open air into the ear of the observer. I have not been able to determine, by experiments on the dead body, why the thoracic voice is at one time strong and clear: at another, strong and less clear; and in certain cases, clear and not strong."

From chapter fourth to the end of the work the auscultatory phenomena of the organs of circulation are discussed. We cannot follow the work through in detail without copying the whole of it, for there is noth-

ing redundant. Such a work on physical diagnosis we have never seen. We have often been distressed at the horrible perversions which even our standard authors make in developing the mechanical principles concerned in respiration and circulation, but to read this work is perfect pleasure. The writer knows both the capabilities and the limits of mechanical forces; he strains no point, and stretches no truth, and when, after ransacking both vital and mechanical principles, he finds some things not sufficiently accounted for; he confesses it with the greatest honesty and simplicity.

The work may be obtained of A. B. Wood & Co., Ann Arbor, Mich.

ART. IV.—*Case of Epidemic Cholera.*

TO THE EDITORS OF THE PENINSULAR JOURNAL OF MEDICINE.

Gentlemen,—I will in a very brief manner narrate to you a disease, the leading characteristics of which were to me somewhat strange and novel, to which I was called on the afternoon of July 16th, 1854, at the village of Newaygo, in the Township of Brooks, (and County of Newaygo,) on the Maskegon River. Patient, Mr. S., aged thirty-five years, constitution tolerably good, habit spare and lean, temperament sanguineo-nervous, and a laboring man.

Mr. S. was first heard to complain, at about three o'clock p.m., of a slight pain in his chest; in about fifteen minutes I was called on to hurry over as soon as possible and see Mr. S., for he was very sick; indeed, when I entered the room, he was rolling upon the floor, notwithstanding that two men were trying to hold him, to prevent him from hurting himself or others (for at first he appeared frantic) and from frightening his wife and family, who at that time were much alarmed. Patient seemed to me as I entered the room wholly unconscious of every person or object that surrounded him, and lost to all in consequence of his extreme sufferings, the seat of which he would indicate by laying his hand upon the epigastrium, saying with great emphasis, "there was the trouble." I think I may safely say, that during the first hour after the attack, it required as many persons to keep him in bed, although standing in the middle of the room, as could well stand around it—I mean during the continuance of the extreme paroxysms of pain, which usually

lasted from two to three minutes; at the commencement of which he would be heard to grate his teeth so as to be heard for several rods across the street, so extreme were his sufferings. During all this while, there were intervals between these paroxysms of pain; when they abated, he would be perfectly rational, although quite exhausted, and would desire to be raised up in his bed, and to be fanned by as many persons as could well get within reach of him. He would then swoon away, and for a moment or two, it was difficult to discern that he breathed at all; then would follow another and another similar paroxysm for a period of full two hours before there was any decided giving way. He would frequently, at the commencement of those paroxysms of pain, scream so loud as to be heard nearly half a mile distant, and spring with such force as to entirely disengage himself from the grasp of the entire group that surrounded him, who were engaged in keeping him upon his bed. Mr. S. seemed to be insensible to all that was passing, wholly in consequence of his excruciating agony, there being no functional or organic lesion of the brain nor of the spinal marrow. Now, to the treatment, which was premised by a pretty free venesection; the efficacy of which did not fully appear. The circumstances under which I saw Mr. S. at first, is my only apology for the venesection; they were that the nature and amount of the diseased action was to me somewhat strange and novel; and the house was filled with an excited company, who were clamorously demanding to know what should be done, or if this or that remedy would not be good? therefore the bleeding was performed, rather to appease their intense solicitude, and allow me time for further observations of the peculiar phenomena of this disease; at the same time, believing it, (the venesection) would not be detrimental to him; on the contrary, I thought it would have a tendency slightly to calm this terrible agitation of the system. In short, the treatment was as follows: Sinapisms to the feet and the calves of the legs and abdomen, mustard foot bath, as soon as we could manage him to do it. Internally, I administered a combination of the tincture of camphor, opium, cayenne, and peppermint, with brandy, without regard to quantity, as fast as it was possible to get him to swallow it. During all this time several persons were actively engaged in making frictions upon the skin, over the bowels and extremities, at the same time paying a close attention to all of those smaller but, at times, not altogether the least efficacious measures.

At last we had the extreme pleasure of seeing Mr. S. most signally

and permanently relieved, which to us and the family and friends was a source of no common gratification. It is true he continued for half or three quarters of an hour to have slight spells of pain, but they grew lighter and lighter, until they altogether disappeared. In conclusion, with regard to Mr. S., his physognomy showed marks of a phthisical predisposition and an excitable temperament. Since Mr. S.'s sickness, I have learned from him, that in the year 1841, at Tampan Bay, in Florida, he had a similar attack, but from that time up to the present attack he had had nothing like it.

This I claim was a genuine case of Epidemic or Asiatic Cholera, notwithstanding it did not occur in the midst of a crowded city, under all those enervating and pestilential causes of disease which there exist. Still the objector may claim that it lacked one of the pathognomic or essential and characteristic symptoms of Epidemic Cholera, viz., the rice water discharges from the stomach and bowels. These discharges are not necessarily and unavoidably a part of Epidemic Cholera, as is shown by Professor Watson, of King's College, London, and other equally good and competent authority; therefore, the absence of both vomiting and purging during the entire attack is no proof (*per se*) against epidemic cholera.

In conclusion, if any of the medical fraternity who may happen to read this brief and imperfect sketch, demur (as the Lawyers say) to any statements herein made, or to the diagnosis of this case, I would most cheerfully receive instruction from them through this Journal.

JAMES H. WOODWORTH, M.D.

Croton, September 8, 1854.

SELECTIONS.

Observations on the Remedial Properties of Simaba Cedron. By S. S. PURPLE, M. D., late Physician to the N. Y. Dispensary, &c.

As this new medicine is likely to attract attention, we make copious extracts from Dr. Purple's pamphlet, as the readiest means of giving our readers early information.—[Eds.]

It will be remembered by those who take especial interest in investigations which relate to vegetable materia medica, that about 1850 the attention of the medical public was particularly called to "cedron," as an invaluable specific for the bites of venomous snakes. In the spring of 1852, Burtis Skidmore, Esq., of this city, placed in my possession, for examination, two of the kernels. This was my first acquaintance with "cedron," for at this time I had not seen Mr. Hooker's description and figure of the tree and cotyledons. From the limited opportunity which these seeds furnished me of observing their effects in an obstinate case of intermittent fever, I became strongly desirous of testing its virtue on an extensive scale in this disease. Such an opportunity I failed in obtaining until September, 1853, when I received from Dr. J. A. Magrath, of Kingston, Jamaica, a package, containing about a pound of the cotyledons.

During the autumn of 1853, cases of intermittent fever were not of unfrequent occurrence in this city, especially in the vicinity of Canal and Hudson streets, and, in fact, in the neighborhood of most of the "main sewers" in different sections of the city. It is not our intention to stop here and offer an explanation of the causes which are, and must be, from necessity, continually at work in producing intermittent fever in this city. This would require a searching investigation into our whole system of drainage and supply, and would in no way answer the objects for which this paper is written. As before stated, cases of fever were not of unfrequent occurrence, and during the months of September, October, and November, nine cases were treated with the article under consideration. Of this number, six were recent, and three were of long standing, having successively resisted quinine, Fowler's solution, and all the usual means resorted to in the treatment of the disease. Of the six recent cases, five yielded readily and permanently to the remedy, in doses and at periods that will be particularized in the following cases; while the remaining one resisted, successively, emetics, cedron, quinine, Fowler's solution, etc., and finally yielded permanently to bebeerine and nux vomica combined. Of the three cases of long standing, and previously treated by different

remedies, unsuccessfully, two yielded permanently to cedron, and one yielded temporarily, returning under the use of the remedy, but finally yielded permanently to cedron, after the administration of an emetic, followed by ten grains of pil. hydra. in divided doses.

CASE 1.—Mrs. E., aged 38 years, of nervous sanguine temperament, rather feeble health, the mother of five children, resided in Newark, N. J., during the summer of 1852, and there contracted intermittent fever, from which she slowly recovered under the use of quinine, having experienced three relapses in the course of the season. In the month of September, 1853, having resided in this city nearly a year, she was again attacked with the quotidian form of the disease, and consulted me in the intermission between the third and fourth paroxysm. She was ordered, as there was considerable gastric derangement, fifteen grains pil. rhei. comp., to be taken immediately; and after the next paroxysm of fever, to take ten grains of the cedron in powder every two hours. At the period of the next (the fifth) paroxysm, she complained of slight headache, but experienced no chill. From this time she was ordered ten grains of cedron, in powder, three times daily, for ten days. She had no return of the disease, and enjoyed after, her usual health.

CASE 2.—Mr. B., book-keeper in a bank, aged 27, of spare habit, contracted intermittent fever on Staten Island, in the fall of 1852, which yielded to quinine. Late in the summer of 1853 he was again the subject of the disease, and consulted me some four weeks after the occurrence of the first paroxysm. Relying upon his own judgment, he had already taken quinine, in the same doses as the fall previous, with the effect of temporarily arresting the disease. Its return, after an interval of nine days, led him to resume the use of the quinine in increased doses, until ringing of the ears convinced him of the propriety of consulting a physician. At the time of his first visit, finding that there existed much tenderness or pressure over the epigastrium, slight yellowness of the conjunctiva, and tongue coated with brown fur in the centre, with red tip and edges, he was ordered thirty grains of ipecac. in powder, with ten grains of calomel. This portion operated freely as an emeto-cathartic, and after the succeeding paroxysm of ague, he was ordered ten grains of cedron, reduced to powder by grating the seed on a nutmeg grater, every three hours. The paroxysm of ague, which was expected, at its usual period, was delayed some two hours, and was somewhat less in severity and shorter in duration than that which succeeded the action of the emetic. As there existed some pain in the bowels, which was supposed to arise from the action of the cedron, he was ordered the same amount as before, every four hours, combined with fifteen drops tinct. opii. comp. These directions were steadily adhered to for four days, when the paroxysms of ague having ceased, he was directed to omit the paregoric, and use the same amount of cedron three times a day. These orders were followed for some two weeks, when the further use of the medicine was suspended. Mr. B. has had no return of the disease. At no time did he complain of ringing in the ears, or any other unpleasant sensations, ex-

cept the slight griping pain in the bowels, which could be attributed to the action of the cedron.

CASE 3.—M. S., aged 29 years, by profession an accountant, of spare habits, and strong nervous temperament, in the summer of 1852, contracted intermittent fever, of the quotidian variety, at Morrisania, where he was then residing. His attending physician put him upon the use of quinine, which, in the course of five days, arrested the paroxysms of ague. Remaining, however, exposed to the same causes, the disease returned in the course of the third week, when he was again put upon its use, with the effect of arresting the disease, although more tardily than on the previous occasion. From this time he remained free from the disease, until January, 1853, when, from domestic causes, his usual health having become considerably impaired, he was attacked with the disease, with much greater severity than on either of the previous occasions. Tonics, combined with quinine, were ordered him by his medical attendant. These were perseveringly used, for a period of four weeks, with but slight beneficial effects, and, meantime, his general health had become still more impaired by the disease. Seeing that something more was required to arrest the paroxysms, he was, very properly, ordered an ipecac. emetic, which was followed by blue pill, in five grain doses, three times daily, until two paroxysms (the fourth day) had passed by, when he was ordered Fowler's solution, accompanied with a liberal diet, and, during the well day, a moderate use of London porter. Under this treatment, there occurred soon a decided improvement in Mr. S.'s case, and, although at the end of two weeks, he had no distinct ague-chill, yet there remained a periodical headache, accompanied with fever, and neuralgic pains in the facial and inferior maxillary nerves. These, under the use of carbonate of iron and vegetable tonics, almost entirely disappeared, and from this time until the succeeding October, with the exception of an occasional chill, or ague paroxysm, he continued to attend to his usual business.

In the latter part of September, 1853, Mr. S. spent about a week on Staten Island, and, immediately on his return to this city, was seized with the tertian form of intermittent fever, for the cure of which, in the course of four weeks, he took an ipecac. emetic, quinine, Fowler's solution, nuxvomica, and pil. hydrar., followed again by quinine, with but slight, or temporary benefit. His general health having now become considerably reduced, he was almost ready to despair of a cure being effected in his case.

On the 2d of November, I was first consulted in regard to the treatment of the case, and, as he had but two days previous taken an emetico-cathartic, and there was but little chylopoietic derangement, he was immediately put upon the use of cedron in powder, and in twenty grain doses, every four hours in the froth of porter, with directions to suspend the remedy only during the hot stages of the disease. For four days he steadily persevered in the use of cedron, and at the end of this period, as there was a marked improvement — the paroxysms of fever having nearly

ceased, and as there was present slight diarrhoea, accompanied with gripping pains in the bowels — the cedron was diminished to ten grain doses, each dose of which was combined with fifteen drops of tinct. opii. camph. This treatment was continued for three days, when all evidence of paroxysmal symptoms had disappeared. Mr. S. was now ordered ten grains of cedron every morning, with a view to its tonic effect, for I had become satisfied that it possessed decided tonic properties, especially in those states of the system which call for the use of columba, gentian, and other vegetable tonics. Under this treatment, he gradually and permanently convalesced, and has since had no return of the disease.

CASE 4.—A. N. aged 19 years, of marked bilious temperament, and robust constitution, on the 26th of July, 1853, sickened with what he supposed was a bilious attack, which, under domestic treatment, continued three days, when he was seized with a severe fit of ague, about 11 o'clock, A. M., which was followed with much febrile excitement, intense pain in the head, etc., which, in its turn, was succeeded by profuse sweating. With this paroxysm, all sickness passed off, and the next day he considered himself in usual health. On the second day from the first ague fit, at M. he sickened again, with a paroxysm, the same as two days previous, when, for the first time, he consulted me. Believing his attack to be intermittent fever, he was ordered to take of cedron in powder, as much as could be held upon a Spanish shilling piece, every four hours, for forty-eight hours, omitting it only during the succeeding paroxysms, if it should occur. He took as directed, in all, ten doses, with the effect of permanently arresting the disease. He has since had no return of intermittent fever.

CASE 5.—A little girl, aged about six years, daughter of Mr. H., of 29th street, was observed to complain every other forenoon, of being chilly, which condition was followed by headache and fever. She was subjected to domestic treatment for a week or more, when the paroxysms of ague became well marked, and the fever was accompanied by delirium. When first seen by me, the centre of her tongue was coated with a brownish-yellow, the tip being red; she complained of lassitude, and considerable pain in the epigastric region. She was ordered ten grains of pulv. rhei, with three grains of calomel, which produced three evacuations of the bowels. She was then directed to take a teaspoonful of the following mixture every four hours; pulv. cedron, thirty grains; simple syrup, two ounces; parogoric, one drachm. These directions were carried out for thirty-six hours, and as the next paroxysm did not recur, she was ordered a teaspoonful morning and evening. Her recovery was complete, and although apparently exposed to the same causes, she has since had no return of the disease.

REMARKS.—In addition to the foregoing cases, reported, and alluded to as treated in the fall of 1853, I have treated six cases during the past summer, (1854) exclusively with cedron, with the following results: Four with cure, prompt and permanent, one passed from my observation before the result was known, and the remaining one is still under observation,

having resisted emetics, quinine, and bebeerine, previous to consulting me.

From these results and those obtained in neuralgic cases, which we think unnecessary to detail, there can hardly arise a doubt but that the cotyledons of the *Simaba cedron*, possess decided anti-periodic properties. And in this belief we do not stand alone. Dr. Cespedes, of Bogota; M. Herran, of France; Dr. P. Smith, of San Francisco, Cal.; and Dr. Magrath, of Jamaica, W. I.; have each testified, as will be seen hereafter, to its decided medicinal virtues in this respect.

Dr. Magrath, of Kingston, Jamaica, has used it extensively not only in the treatment of intermittent fever, but also in yellow fever. In this latter disease, he writes me, that it appears as useless as quinine, or any other remedy to arrest the progress of the disease, in most of the cases in hospital, although it was thought that the skin of those who were taking it, was less dark or congested, than those who did not take it. His mode of giving it in intermittent fever, was in powder, or in pills, in ten grain doses every three hours, for twenty-four or thirty-six hours, and with the effect of successfully arresting the disease; he always gave it during the intermission, and it almost always prevented a second paroxysm if it failed in the first.

Thus it will be seen that the evidence which has already accumulated in regard to this plant, points to the fact that it possesses important anti-periodic properties. And perhaps upon further investigation, it may be found to be a valuable substitute for quinine—a desideratum long sought after. Our own observations have been confined to the cotyledons in powder in intermittent, and in tincture in neuralgia, dyspepsia, and chronic derangements of the stomach, involving impaired digestion. In these conditions we are satisfied that it possesses curative properties equal to columba, quassia, or any of the vegetable tonics, and in view of these properties, we feel assured that it is worthy of an exalted position among this classification of the vegetable *Materia Medica*.

In regard to the history of its introduction into practice, we have nothing certain. M. Herran, Charge d'Affaires de la Republique de Costa Rica, in France, says that "it was only in 1828, that the native Indians brought to the market of Carthagena, some seeds of *cedron*. To prove their infallible virtue, they submitted animals and themselves to be bitten by the most dangerous serpents, called *Toboba Corlia de la Montagne*, etc., and the promptitude with which the poison was neutralized, was so marvelous that a single seed sold for a doubloon, (eighty-three francs.)"

* * * * *

"During my long sojourn in Central America, I had recourse to the seeds of *cedron*, successfully, in eight different cases." * * * * *

"I have also successfully employed this medicine in intermittent fevers, which had resisted sulphate of quinine."

Mr. Berthold Seeman, the historian of the "Voyage of the Herald," whilst engaged in the exploration of the canton of Alange, and on his road to the village of Remedios on the 29th of January, 1849, "found

the Cedron, a tree," he says, "which has gained great celebrity and is well deserving of particular notice. The most ancient record of it which I can find, is in the 'History of the Buccaneers,' an old work published in London in the year 1699. Its use as an antidote for snakes, and its place of growth are there distinctly stated; but whether on the authority of the natives or accidentally discovered by the pirates, does not appear. If the former was the case, they must have learned it while on some of their cruises on the Magdalena, for in the Isthmus, the very existence of the tree was unsuspected, until about 1345, when Don Juan de Ansoategui ascertained that the *cedron* of Panama and Darien was identical with that of Carthage. * * * * In the Isthmus it is generally found on the out-skirts of forests in almost every part of the country; but in greater abundance in Darien and Vraguas, than in Panama. The natives hold it in great esteem, and always carry a piece of the seed about with them. When any one is bitten, a little mixed with water, is applied to the wound, and about two grains, scraped in brandy, or in the absence of that, into water, is administered internally. By pursuing this treatment, the bites of venomous snakes, scorpions, centipedes, and other noxious animals, have been unattended by dangerous consequences. Doses of it have proved beneficial in cases of intermittent fever. * * *

Each seed, or cotyledon, I should rather say, is sold in the chemist shops of Panama for two or three reals (about 1s. or 1s. 6d, English), and sometimes a much higher price is given for them."

Dr. Peter Smith, of the City Hospital, of San Francisco, received a letter dated Nov. 22d, 1849, from Don Jose Abaldia, Governor of Panama, in which it is stated that, "the tree which produces the fruit, and is called the '*cedron*,' is described in the scientific work of Dr. Cespedes, one of their own naturalists. * * * * The tree grows abundantly in humid places, and as the wood is inapplicable to the uses of life, and the fruit neglected by animals on account of its bitterness, an abundant supply is predicted."

I might here state that the first specimens I saw, those presented me by Mr. Skidmore, were obtained at Panama.

Dr. Horner, of the U. S. N., states "that Dr. Smith, of San Francisco, used for the cure of chronic dysentery and intermittent fever, the kernels of the cedron, a fruit obtained at Panama. * * * * He gave them scraped in the dose of ten or more grains, and thought them equally as efficacious as quinine. The cedron has great celebrity among the people of the Isthmus, for the cure of snake bites, and he states that they carry it about their persons to have it in readiness for immediate use when needed. Dr. Smith gave me a number of kernels, and one entire pod, which I brought home for distribution. While crossing the Isthmus, I would have been much pleased to find the tree which yields this valuable medicine, but I was unable to obtain any accurate description of it, or of the places where it grows."

Dr. Pereira, in the last edition of his great work, on *Materia Medica*, makes no mention of this plant. On the 2d of Nov., 1850, however, he

wrote Sir J. W. Hooker, regarding it in the following words, "I am not acquainted with any observations made in England, or even in Europe, respecting the *Simaba cedron*. * * * * The specimen of the seeds and fruit, which I possess, were brought a few months ago from Panama, by a gentleman (not a medical man). They were given him by W. Barrington, Esq., an English surgeon at Panama. The statement accompanying them was to the effect that the seeds were much used, and with great confidence by the native doctors of the Panama country, both locally and internally, as the grand antidote against snake poison.

"To the taste these seeds are intensely bitter, and doubtless like the bitter barks and woods of other Simarubaceous plants (*e. gr. Quassia* and *Simaruba*) they possess the properties of our bitter tonics, and might be useful in dyspepsia, and perhaps ague."

From all that we can learn regarding its habitude and mode of procurement, we are led to believe that the only obstacle in the way of the use of cedron in medicine, is its apparently somewhat limited supply. We say apparent, for in a letter received from Dr. Magrath, we learn that "the cedron appears to be obtainable in quantity, with some little difficulty, from Carthagena; but a brisk demand, no doubt, would cause an equal supply." The history of all new medicinal agents, derived from savage or semi-civilized countries, teaches us the fact, that at first, the remedy sought after is obtained with much difficulty; but we should not, from this cause alone, neglect to investigate or enquire into its uses; and should it, according to our belief, be found that this article possesses decided merit, and some advantages over quinine, we have no doubt but that some of our enterprising commercial druggists will find it to their interest to devise means for its introduction into our market.

Finally:—From the declared experience of various observers of the medicinal effects of the *Simaba cedron*, we are warranted in drawing the following conclusions regarding its therapeutic action:—

That it possesses decided anti-periodic properties, and is therefore applicable in the treatment of periodic diseases.

That it is less likely than quinine to produce the aggregate of encephalic or neuropathic phenomena, induced by overdoses.

That it may, in large doses, repeated often, produce griping of the bowels, and even diarrhoea; but that these conditions are easily controlled by appropriate medicaments.

That, as a remedy in intermittent fever, it possesses properties, in many respects, equal to quinine, and in most cases is equally adapted to the curation of this disease.

That, in the treatment of yellow fever, it does not appear to possess any particular advantages over quinine, but nevertheless is equally well adapted to fulfill the indications which call for the use of this latter remedy.

That it possesses marked tonic properties, and deserves a prominent place in this classification of the *Materia Medica*.

That in chronic dysentery, diarrhoea, dyspepsia, and all states of the

stomach, accompanied with impaired or difficult digestion, its use will be found to be attended with benefit.

That, should a demand arise for its use in medicine, it is believed that it will be found not difficult to obtain a supply, in quantities sufficient to afford it at much less price than quinine.

Solidified Milk.

A few days since we had the honor of an invitation to accompany a committee of medical gentlemen appointed by the New York Academy of Medicine, to visit the establishment where the above mentioned article is prepared. After an agreeable railroad trip of 80 miles or thereabouts, in the Harlem cars, with Dr. Griscom, chairman of the Committee, Drs. Isaac Wood, Blakeman, Shanks, White, and Dr. C. T. Harris, Chemist, who for several years has been associated with Mr. Blatchford in perfecting the preparation, we reached Amenia, some 20 or 30 miles east of Poughkeepsie, Dutchess Co. Here we were joined by the venerable Dr. Blatchford of Troy, whose son is proprietor of the establishment. Conveyances were in readiness to carry us a few miles nearer the Hudson, over rolling hills which afforded a fine opportunity for judging of the pasture ground, as well as ventilating our lungs of city air. No member of the Committee ventured suggestions of slop milk.

While some of the party spent the night with the proprietor, others of us enjoyed the politely offered hospitality of Dr. Smith, who regaled us with a scientific treat in the shape of the most beautiful and neatly classified private collection of minerals we have ever chanced to see.

By day-break the Chairman of the Committee was aroused (the penalty of office) to be present at the milking, that he might testify as to the purity of the source of the milk, and the appearance of the cattle.

After our morning repast, we were invited to witness the process of *solidification*.

To 112 lbs., of milk, 28 lbs. of Stuart's white sugar were added, and a trivial proportion of bi-carbonate of soda, a teaspoonful, merely enough to ensure the neutralizing of any acidity, which in the summer season is exhibited even a few minutes after milking, although inappreciable to the organs of taste. The sweet milk was poured into evaporating pans of enameled iron, embedded in warm water heated by steam. A thermometer was immersed in each of these water baths; that, by frequent inspection, the temperature might not rise above the point which years of experience have shown advisable.

To facilitate the evaporation—by means of blowers and other ingenious apparatus—a current of air is established between the covers of the pans and the solidifying milk. Connected with the steam engine is an arrangement of stirrers, for agitating the milk slightly whilst evaporating, and so gently as not to *churn* it. In about three hours the milk and su-

gar assumed a pasty consistency, and delighted the palates of all present; by constant manipulation and warming it was reduced to a rich creamy looking powder, then exposed to the air to cool, weighed into parcels of a pound each, and by a press, with the force of a ton or two, made to assume the compact form of a tablet (the size of a small brick,) in which shape, covered with tin foil, it is presented to the public.

Incidentally we had an opportunity of judging of the cleanliness of the establishment; for while in some of the pans the process of evaporation was being completed, others were being washed for a second charge.— (One of the Committee hinted, that the refuse washings were no bad approach to much of our city milk.) Great precaution was used lest any of the first evaporation should be subjected to a second heating, as the last batch might thereby be spoiled.

During the day the Committee made an excursion through the thousand acres of pasture land, connected with the establishment, and visited some of the commanding points of view from whence might be seen in a glance, the hills of Connecticut, Massachusetts, and the cloud-crested Catskills of New York. This panorama of distant hill tops, of green grass, and blue sky, will not fade from remembrance. To vary the entertainment, attempts were made to secure a few frogs, for exhibiting the *circulation of the blood*, making *frog batteries*, etc., but with limited success—the weather being cool, only two were netted and bagged. The old mountains echoed and re-echoed many a hearty peal of laughter at the anecdotes of medical experience, which might prove a valuable addition to the “Diary of a Physician.”

After a sumptuous dinner, we had the honor of being requested to read to the Committee a monograph on the chemical constitution of milk, with an exact account of each of the important ingredients involved in the process of solidifying and preserving this article, written by Mr. Dalson, the chemist to whose talent we are indebted for this invaluable preparation.

After a vote of thanks on the part of the guests to their host and hostess, and an expression of gratification on the part of the proprietor to the Committee for their interest and apparent satisfaction, we resolved ourselves into a committee of cooks, dairy-maids, experimenters, tasters, etc.

Some of the solidified milk which had been grated and dissolved in water the evening previous, was found covered with a rich cream, this, skimmed off was converted into excellent butter. Another solution was speedily converted into wine whey, by a treatment precisely similar to that employed in using ordinary milk. It frequently equalled the expectations of all; so that solidified milk will hereafter rank among the necessary appendages of the sick room. In fine, this article makes paps, custards, puddings, and cakes equal to the best milk; and one may be sure it is an unadulterated article, obtained from well-pastured cattle, and not the produce of distillery slops—neither can it be *watered*.

For our steam-ships, our packets, for those traveling by land or by sea, for hotel purposes and use in private families, for young or old, we recommend it cordially as a substitute for fresh milk.

We look with interest for the scientific report of the committee of the Academy of Medicine, in which we hope for an exposition of the domestic, culinary, and hygienic properties of solidified milk.—*Amer. Monthly Med.*

[If this process of solidifying milk proves to be all it promises, the cheaper and richer grazing lands of the *West* will furnish an attractive field for prosecuting the enterprise.

The cheapness of fuel, from the abundance of coal in Illinois, added to its superior advantages as a grazing country, and the ease with which this product can be transported, will enable her not only to supply her own wants, and contribute with other Western States, to supply the wants of the extensive lake and river navigation, but to become a formidable rival with New York, and other eastern States in supplying the eastern market.]

From the American Monthly

Remarks on Croup and its Treatment. By HORACE GREEN, M. D.

(Concluded from page 125.)

As before asserted, since the publication of our work on croup, we have received similar verbal statements, in favor of topical medication, from physicians resident in almost every State in the Union; but we have also abundant *written* testimony on this subject.

The following cases from Prof. May, of Washington, who is one of the most distinguished of American surgeons, will be read with much interest.

My Dear Sir:

Washington, April 30th.

I herewith enclose you a hasty and brief account of the cases of cyanche trachealis, in which I have used the strong solution of nitrate of silver, as recommended by you in your work on croup. The statement of these cases is not as full and satisfactory as I could have desired, owing to the partial notes hastily taken by me at the time of their occurrence; but the result, in several of them, fully sustains the great value, of the local agent recommended by you, to arrest this formidable disease, and which you have been, I believe, the first to bring fully to the consideration of the profession.

I am very truly and respectfully yours,

JNO. FRED'K MAY.

Case 1st.—On the 2d Jan. I was called on to visit a son of Mr. C., of this city, aged about ten years, whom I found laboring under symptoms of croup. The child had been complaining of some uneasiness about the throat, with hoarseness and slight cough, a day or two before I saw

him. At my visit, his respiration was difficult, and there was a good deal of tenderness about the tonsils and fauces, which were inflamed. There was considerable febrile action, and the little patient was very restless, and the voice quite hoarse. I directed an emetic, to be followed by an active mercurial cathartic, his bowels being constipated, and such local applications, both internal and external, as I thought most likely to give relief.

At my visit next day, I found my little patient no better, but on the contrary, his symptoms were more unfavorable and alarming. His respiration was very difficult, and his countenance expressed great suffering and anxiety. He could not remain more than a few moments in a horizontal position, but was raising himself up continually, and stretching backwards the head to obtain relief. In a word, the difficulty of respiration was extreme. He was very hoarse, his pulse very hurried, and the throat and tonsils more inflamed than at my previous visit. The symptoms of diphtheritic croup, which had been epidemic in our city the year previous, were very decided. I at once resolved to try your method of introducing a strong solution of argent nitrat. into the larynx—everything else having been tried by me, in this disease, the year previous, not excepting the tracheotomy, with but little success. The symptoms were very urgent. I felt satisfied that, unless soon relieved, the case would probably end fatally. I had no instrument sufficiently small for the object I had in view, and I therefore bent a small piece of ash stick to the proper curvature, and secured to the end of it a small piece of sponge, which I saturated thoroughly with a solution of the crystalized nitrate, of the strength of forty grs. to the ounce, and introduced it fairly into the larynx. This I repeated once or twice, on the spot, the child being forcibly held by the father. There was considerable irritation produced in the throat for a few moments, but I believe it was caused as much by the effort, on the part of the child, to resist, as by the action of the caustic.

I remained some time, after using this remedy, and in half an hour the improvement in his breathing was manifest to all present. I left him breathing decidedly better, and when I returned in the morning I found the child had passed a quiet and comfortable night, having slept a considerable portion of it. The caustic solution was again used by me, in the same way, at this visit, his breathing having again become somewhat more difficult, and with the same improvement in his condition. My visits to him were soon after discontinued, the little patient having entirely recovered.

Case 2d.—I was requested in May, by my friend, Dr. Dawes, to visit, in consultation with him, in the country, a little girl of two years of age, the daughter of R. S. Wood, Esq.

Dr. D. had been in attendance on the child for several days, and had administered the usual remedies in her disease, which was membranous croup. Having mentioned to him, some time before the success of the argent-nitrat. solution, in the case which I have already stated, he was desirous of having it used in the present instance.

When I saw the child the breathing was extremely difficult, and the cough tight and ringing. The little patient was much exhausted, having slept but little during the twenty-four hours which had passed. It was constantly held by the mother in her lap, or by some of her friends, as the respiration became more labored when she was placed in the bed. I at once used the solution of crystalized nitrate of silver, introducing it into the larynx, and cauterizing also the back part of the throat, freely. The solution was of the strength of fifty grs. to the ounce.

The respiration became easier before I left the house. This was apparent to all, and at the same time the pulse improved, and the skin became more natural and warm. On our return, early in the morning we found the little patient had passed a much more comfortable night and her breathing had decidedly improved. The caustic was, however, again used, and with an equally satisfactory result. The symptoms of the disease gradually yielded, and the child recovered. As I was not aware, or had forgotten the treatment which had been pursued, in the commencement of her case, I applied to Mr. Wood, who had formerly pursued the study of medicine, for a statement of it. I received the following reply:

"My daughter, about two years old, was attacked with croup in the month of May last. She had never suffered previously from any disease, and her constitution was good. After trying the usual domestic remedies, such as hot baths, emetics, local applications, and small doses of calomel and ipecac. frequently repeated, we were induced to send for our family physician, Dr. Dawes, who prescribed mercury to the full extent warranted by her critical situation. On the third day, the doctor proposed consulting with you, in regard to the propriety of introducing a strong solution of the nitrate of silver into the larynx. I readily gave my consent, and the operation was performed twice within twelve hours. The character of the respiration was perceptibly changed on the first trial, but we felt doubly sure of success on its repetition; the pulse rallied, and the color of the skin became more natural.

"She is now enjoying perfect health."

Other cases have been treated by Dr. May with equal success, the history of which have been furnished by him; but, as our object has been to give the testimony of different members of the profession, from various localities, these may with propriety be omitted.

Dr. A. M. Vedder, Lecturer on Anatomy and Physiology, at Union College, has treated many cases of membranous croup by topical measures. The subjoined cases were communicated by Dr. V.

Even at the present day, there are medical men who will not admit that the passage of an armed probang into the larynx of the adult can be accomplished. Much more emphatically do these men deny the possibility of cauterizing the larynx of the young child. Within the last year, an astute professor in one of our medical colleges declared, before his class, his firm belief that the operation had not been, and never could be, performed! To such "blind guides," we would commend the interesting fact recorded in the second case reported by Dr. Vedder.

Case 1st.—A little girl, aged six years, was under treatment by a neighboring practitioner, who called me in consultation. She was first taken with what we supposed to be slight catarrhal symptoms; after a few days, the cough became stridulous, and was accompanied with some fever. These symptoms continued for three weeks, gradually increasing in severity. At this time I saw her in the evening, and found her laboring under the characteristic symptoms of inflammatory croup; pulse rapid, and small; voice reduced to a whisper; respiration high and labored; tonsils red and inflamed, but not covered with false membrane. The attending physician had treated her with sinapisms, calomel, and tartar emetic, the latter in emetic and nauseating doses.

I suggested the topical application of nitrate of silver, which was readily acceded to. Two applications were made (\ominus ii. to Ξ j. aqua). The probang was found covered with a thick, tenacious secretion. Respiration became somewhat more free. On the following day, there was a marked increase of all the symptoms, the silver was again applied three or four times during the day, entering the glottis each time. There was now a gradual improvement of all the symptoms, and no further applications were made. During this time, calomel and James' powder were also administered.

Case 2d.—Louisa —, aged six years, general health previously good, came home from school (Nov. 1st) complaining of sore throat and cough, which was followed by vomiting. A homœopathic doctor was sent for, who treated the case as "sore throat" for five days. During this time, she was not wholly confined to the bed, and was about the house a part of the time. On the afternoon of the fourth day, she became very hoarse, with loss of voice and decided croupy cough. Nov. 6th, confined to bed, with considerable heat of skin and thirst. I saw the patient this day for the first time, at 6 o'clock, P. M. Expression of countenance anxious, skin pale, voice reduced to a whisper, respiration extremely difficult, high and characteristic, pulse frequent, skin above natural temperature, cough frequent; applied the nitrate of silver with the probang, which did not produce any unpleasant symptoms; her breathing became somewhat easier; during the night her respiration became more difficult, and an emetic was administered, which was followed by some relief. Nov. 7th, A. M. Countenance still anxious, color of skin inclining to blue, respiration not much improved, almost complete aphonia,—prescribed the following powder, to be taken every three hours.

R \bar{c} Tart. Antim., gr. $\frac{1}{8}$,
Hyd. Chlor., M. gr. $\frac{1}{4}$,

m.

Applied the silver three times during the day. Nov. 8th, no improvement, sweats now freely, and has done so all night. On coughing, expectorates a little mucus, particularly after applying the sponge, continue powders and apply cold water to the neck by means of a towel. Nov. 9th, no improvement; applied the sponge, and on removing it *the false membrane* was found attached to the sponge; and on examination found

it to be a membranous tube two and a-half inches in length, and about one-half the thickness of milliner's pasteboard. Her respiration became immediately easier and she continued to improve from this time; the sponge was not again applied, her cough remained "croupy" for several days longer, her voice did not become natural for more than a week after, the cold water and expectorants were continued for several days. Her health has been good since: her voice becomes hoarse, occasionally, on taking cold. I should have remarked, that at my first visit I saw patches of lymph on the tonsillory glands. On taking charge of the patient (which I did with great reluctance), I had very little hope of a favorable termination, on account of the advanced stage of the disease, and must attribute the cure to the application of the silver.

Since treating this case I have used the silver with varying success. In two cases, in which I was called early, and in which the lymph could be seen in the upper part of the fauces, the patients recovered. In one case where I was called in consultation, the patient was in *articulo mortis*. We used the silver without any relief. In two other cases, I was called late in the disease; the nitrate of silver, and other remedies were employed; but both cases terminated fatally.

Believing, as we conscientiously do, that the reducing, perturbing plan of treating young children for croup, is, in a large proportion of cases, not only useless, but worse than useless; and that, on the other hand, we have, in the topical treatment, when judiciously combined with mild general measures, an entirely practicable, and, in most cases, an effectual means of arresting the disease, we are solicitous to remove the objections, which, for various reasons, exist in the minds of many practitioners, and hinder their adoption of this method. We have alluded to the dogmatic scepticism of one class, but fortunately this class of "unbelievers in the earth's rotation" is very small. Still, there is a much larger class, who, whilst they admit both the practicability and utility of the treatment, reject its employment because of the supposed difficulty of medicating the larynx in disease. This difficulty, we can assure the profession, does not exist. It is neither really difficult to accomplish, nor is it in any degree a hazardous operation. Any medical man who understands the relative anatomy of the parts, can, with very little practice, readily pass the sponge probang into the larynx; and, as benefit comes from the attempt (for the parts cauterized thereby are those first affected in croup), no time should be lost in putting the method into practice, in the onset of the disease.

During the prevalence of the disorder, last winter, when the writer was receiving calls daily to visit cases of croup, a request came from a physician residing in Morrisania, to meet him in consultation in a case of membranous croup. As the writer could not comply with the request, his assistant, Dr. Richards, attended the consultation; and he testifies to the fact, that the case was one exhibiting all the characteristic signs of true croup, of a very severe grade. The physician, Dr. Mann, who is an accomplished and experienced practitioner, had had many opportunities of

treating croup by the ordinary method; but in this case, which we shall give, he employed, for the first time, we believe, cauterization of the larynx; and it will be seen that in his hands the operation was both practicable and successful. So much pleased was Dr. M. with its effects that he has since placed his entire dependance, as it will be seen, on topical medication alone in the treatment of the disease.

The following communication has just been received from Dr. Mann:

Morrisania, May 12th, 1854.

DOCT. HORACE GREEN—

DEAR SIR:—The enclosed list of cases of *Cynanche Trachealis*, I send agreeably to your request. In none of them were any internal remedies used, not even a preparatory emetic, except, where circumstances required it, a mild cathartic. With this exception, they were all treated by topical applications exclusively.

Case 1st.—On the 7th of February last I was sent for, at 4 o'clock, A. M., to attend Alfred ———, aged four years. Circumstances prevented my seeing him until 8, A. M. I then found him laboring under true membranous croup. The attack commenced on the evening of the 6th, preceded by hoarseness and slight cough. I had previously attended the patient on January 8th, for pneumonia of the left lung, from which he had recovered perfectly, though still somewhat weakened by this illness. I found the little fellow struggling for breath, each effort at inspiration accompanied by a loud crowing sound, the muscles of the mouth contracting violently at the same time, the countenance and lips livid, a cold perspiration standing in large drops upon the face, and every symptom indicating rapidly approaching dissolution. I immediately passed through the larynx and nearly down to the bifurcation of the trachea, a sponge-armed probang, containing one drachm of a sol. argent. nit. xl. grs. to 3 j. The first effect of this application was a severe fit of coughing and choking, followed by copious vomiting, which relieved the respiration temporarily. Between this time, viz., 3 A. M. and 7 P. M., five applications were made; at about the latter hour Dr. Richards saw the patient with me. We found him sitting up, perfectly conscious and able to speak, and had taken some beef tea. Respiration entirely free from any crowing sound, which could now only be heard during a fit of coughing. Skin moist. Feb. 8th. Continues still improving; respiration natural; slept at intervals during the night; appetite craving; cough troublesome; slight fever; face flushed. Feb. 9th. No symptoms of croup remain; slight bronchitis, which yielded in a few days to mild remedies.

Case 2d.—On February 11th I was called to see Sarah ———, aged two years. The patient had been suffering for two days previously, with hoarseness, and what the mother called a "sore throat," accompanied by a loud ringing cough. On examination of the larynx and fauces, I found them considerably inflamed. The tonsils were enlarged; and adhering to the posterior surface of these glands, I discovered a white sub-

stance lining them, and extending downward toward the larynx. The symptoms of true membranous croup were strongly marked. Skin hot and dry; face flushed; countenance expressive of anxiety and suffering; cough and respiration characteristic. I immediately made an application by means of the sponge-probang to the fauces and larynx, of a sol. argent. nit. grs. lx. to 5 j., then passed through the rima glottidis.

Feb. 12th. Patient playing about the room; respiration natural; cough troublesome, and accompanied by a free secretion of thick, ropy mucus, which the patient on raising immediately swallows. Detached the white substance from one tonsil, and found it to be a firm membranous exudation. This child had one other application of a weak solution, and was perfectly recovered on the third day after the first visit.

Case 3d, Feb. 25th, John ——. This patient was seized with slight hoarseness toward evening, on the 24th, but awoke at about 4 o'clock, A. M., with unmistakable symptoms of croup, which were rapidly increasing in urgency and danger. Ipecac. onion draughts and mustard, with other domestic remedies having failed to produce relief, I was summoned to the sufferer. Applied a sixty grain sol. at once, 7 A. M.—At 4 P. M. found the respiration much relieved, the patient being better in every respect. Applied a thirty grain sol.

Feb. 26th. The little fellow saw me tying my horse, and fearing, as he expressed it, that I was going to “run the poker down his throat again,” scampered off and hid.

The above cases it gives me pleasure to submit to your perusal. I should have regarded any one of them as nearly hopeless under the old plan of treatment.

Very respectfully yours,

E. P. MANN.

Doct. Horace Green, 12 Clinton Place.

With the history of one more case, voluntarily furnished by Dr. M., an intelligent physician of a neighboring State, we shall close our selections from the mass of testimony that has been received, in favor of the plan of treatment advocated in these pages.

Dear Sir:

You will excuse the liberty which I assume in addressing you. I cannot forego the opportunity I have in expressing to you the gratitude I now feel for your kindness to me, and for the information I acquired in the short time I passed in your office, during my late visit to your city. So elated do I feel with the result of your mode of treating diseases of the air passages, that I must trouble you to read an account of my first experience in the use of topical applications, in an interesting case of croup.

Feb. 18th, at 8 P. M., a gentleman entered my office in some haste, and requested me to step across the street and see his child, which he feared was dying. Without ceremony or question, I accompanied him home, where I found two physicians, with some dozen more or less,

neighbors, surrounding the bed of a little fellow, six years of age. The sound of his inspiration and expiration was to me a sure index of the nature of his disease. In the diagnosis we could not be mistaken. He was in the very last stage of membranous croup. The patient was of a bilious temperament, black hair and eyes, dark complexion, very large head, with a short and very thick neck; broad chest, and for a boy of his age very muscular. It was with the utmost difficulty that he could breathe, every muscle of his body seemed brought into action at each respiration; the countenance was flushed and anxious, the lips pale and swollen, the eyes protruded, nostrils dilated, and ever and anon that cough, the sound of which you know, but which I cannot describe; pulse beyond enumeration. All these were sufficient to cause the friends and physicians, as well as myself, to believe the child to be in *articulo mortis*. I, however, proposed cauterization with the probang; the physicians, after explaining to them what I *meant*, opposed it, on the ground that it was not only perfectly useless, but it was utterly impossible to pass it into the larynx; the which, I of course flatly denied. I then, without much regard to professional etiquette, as the case demanded action rather than ceremony, and also because I was determined, if possible, to try your plan, explained to the friends, as well as I could, the nature of what I proposed to do, the objects in view, and the probable results that might reasonably be anticipated; nor did I keep back the fact that the child, notwithstanding, might die.

The friends immediately consented to my doing what I pleased, as the child would die without immediate relief. All the usual remedies, such as emetics, leeches, blisters, &c., had been used. I immediately made a sol. of argent.-nitrat. cryst. fifty grs. to the ounce of aqua. distil., saturated the sponge, and made the attempt to pass it into the larynx; the child struggled and I did not succeed, but, what was very good, I did succeed in sponging the fauces and epiglottis. My failure, however, to pass into the larynx, was a sort of triumph to the non-believers. However, the child strangled, coughed and discharged considerable ropy mucus. After a delay of some fifteen or twenty minutes, I secured the head of the child, and made the attempt again; and what is *better*, I *succeeded well*. The little fellow strangled, coughed, and discharged a large quantity of thick ropy mucus, with patches or shreds of membrane, and in one minute was sensibly relieved. In ten minutes the wheezing sound in expiration was gone. Then was my hour of triumph, and I made use of it. After waiting a half hour, I prescribed hyd. sub. mur., gr. i.; ipecac., gr. i.; opii., gr. $\frac{1}{8}$, every hour, and left for home.

It will be unnecessary to follow out the farther history of the treatment in this case, as detailed by Dr. M——. Topical, with the required general treatment, was continued for several days, and the patient recovered perfectly.

The history of these last cases has been given, not only as corroborative of the efficacy of the treatment, but to show, what has proved true in many other instances, that where intelligent medical men have made

the attempt, earnestly, to medicate the larynx, their efforts have, in all cases, been successful.

It was our intention at the close of this paper to have submitted a detailed statement of the plan, both local and general, that we would advise to be pursued in the treatment of membranous croup. But the pages allotted us in the *Monthly*, have been already fully occupied. Besides, these views have been stated at length, in our work—"Observations on the Pathology of Croup, and its treatment"—which has been several years before the medical public.* The accumulated experience furnished from the treatment of a large number of cases of croup, since the publication of that work, on the plan therein advocated, *without the loss of a single patient, in our own practice*, has confirmed us in the opinion of its efficacy over all other methods hitherto advanced for this terrible malady; and it has impressed us with the full belief, that had the prejudice against topical medication not existed with the profession in this city—a prejudice which, we regret to add, has been excited and fostered by some of our prominent medical men—and this method conjoined with *mild*, constitutional remedies, had been generally adopted in the treatment of those *six hundred and eighty* fatal cases of croup, which occurred during the last year, not one-half that number would have perished, at least from that disease of which they died.

* With regard to the general treatment in the management of croup, we accord fully with Dr. Ware, in the propriety of avoiding, generally, "all reducing, depleting and disturbing remedies" We would administer, as required, mild emetics of ipecacuanha, or ipecac and sulphate of zinc Calomel alone, or in combination with Dover's powder, or opium is frequently required but never in *scruple doses*, as it has been recommended to be given to young children, by some practitioners in this city. These remedies, together with the inhalations of the vapor of warm water, may be employed in the treatment of croup. But our main dependence in all stages of the disease should be on *cauterizations*. "This measure," says Prof. Wood, in his work on the "Practice of Medicine," "after an unsuccessful employment of other means, the practitioner would certainly be justified in resorting to." We would advocate its employment in the very access of the disease, as soon as the nature of the malady is ascertained. We have seen the disease repeatedly arrested in its formative stage, by a few prompt applications of the nitrate of silver to the fauces, and about the opening of the glottis.

After the inflammation has advanced, and the surfaces of the larynx have become involved in the disease, the argentine solution should not only be applied to the tonsils, and to the faucial region generally, but the applications must be extended into the laryngeal cavity.

If the exudations are not already formed into adventitious membrane, the employment of a few successive applications below the epiglottis may be sufficient to arrest the plastic inflammation altogether. But even in a more advanced state of the disease, when from its continuance and the severity of the disease, we have reason to apprehend the formation of a false membrane, or a "tubular mould" throughout the larynx and trachea, we should not despair of removing the obstruction, or arresting the inflammation.

When called, therefore, to a case of croup in this, its second or developed stage of the disease—and unfortunately, it is not until this period of the affection that medical aid is resorted to, in a large proportion of the cases of croup—the local employment of the nitrate of silver, conjoined with other appropriate measures, should be entered upon at once.

EDITORIAL.

We find upon our table the Transactions of the Medical Association of Southern and Central New York, at the Eighth Annual Meeting, held in June last, and have been much interested in its contents.

The President's Address was conceived in a good spirit, and contains many useful suggestions. An article upon the effects and therapeutical application of Opium and Quinine is discriminating and practical; and the various other articles in the Transactions are highly respectable in their characters and honorable to the society. But we have been more particularly interested in the Essay upon Medical Education, by Daniel Holmes, M.D., of Smithfield, Pa.

We have been interested in this Essay not merely in consequence of its intrinsic merits, which however are of a high character, but as entertaining the sentiments of the sound and enlightened portion of the Profession in the "Rural Districts" (where there is often found the most good sense) entirely out of reach of the influence of the schools.

The author, after referring to the Profession, in some judicious remarks, as a Science and an Art, and after speaking of the want of confidence entertained in it by the public, and of the prevalence of Quackery in its present multifarious forms, out of the regular ranks, and even within them; enquires as to the cause of this state of things, and answers as follows:—

"The truth compels us to admit that a part of the evil, at least, arises from receiving into the Profession those who are very deficient both in preliminary and medical education. In this manner charlatanism is introduced and sustained in the ranks of our own worthy and time-honored profession. This fact has for a long time been acknowledged by many intelligent and worthy members of the fraternity."

He then enquires "How the evil is to be remedied, in this utilitarian and money-making age — when business is dispatched on the rail-road system, and news sent with the velocity of lightning; when private practitioners will receive uneducated and often unworthy young men into their office for the sole purpose of benefiting themselves — when physicians will condescend for their own private interests, or to benefit and please their friends, to give certificates to young men for study not performed—when there are so many antagonistic medical colleges in our midst, and nearly all scrabbling in the same race for the same prize — I

mean the paltry gain of *glittering gold*, and for the expectation of having large numbers in attendance; and, above all, when regular *chartered* Medical Colleges, and those who would desire to stand in good repute among the profession and the community, grant their diplomas to, and confer their highest honors on, those who have very little preliminary education, and still less of office study, and with only one course of medical lectures?"

He mentioned facts to show that these charges though sounding harsh are not unfounded, and proceeds:

"I am of the opinion that more proof should be given [to the colleges] of the student's preliminary education, office-study and good moral character than a mere certificate of one private perceptor—such as the attestation of several literary gentlemen, examinations," &c. [by the college where he applies for entrance, we suppose is meant.—*Eds. Pen. Jour.*]

After speaking of the routine and injurious practices, and the low rivalries and private bickerings of ignorant and unqualified pretenders, he says:

"Now if the evils to which I have adverted, do exist, or even a part of them, it requires no elaborate effort to prove that they must be removed, in a measure at least, before that universal confidence, which the profession should command, can be expected to exist in the minds of the community, or the competent physician be permitted to occupy that position in society which he truly deserves. Hence, the mooted point would seem to be—How shall this practical change be effected, and the profession placed in its true light before the people? We would most unhesitatingly answer, that it is to be done by a more *thorough education*—by a more friendly intercourse between individual members of the profession, and by establishing more extensively, County Medical Societies. But the last two things suggested, will be the natural result of thoroughly accomplishing the first. Hence, then, *Education* is the great desideratum."

The author then speaks of the importance of instructing the people in some of the great principles of Anatomy, Physiology and Hygiene—of the longer term of study and higher qualifications required in the trans-Atlantic corporations before admission into the profession than is the practice in this country, and of the clinical instruction received abroad, and thus proceeds:

"But in the United States, hospitals are so few, comparatively, and conducted in such a manner, that only a small portion of medical students can expect to have access to them. Hence the deficiency must be made up some other way, and the only means for supplying this deficiency must be found in the office of the private perceptor. For the

amount of real and useful clinical instruction, derived from clinical lectures and public surgical operations performed in the amphitheatres of our Medical Colleges, is very small indeed; and also a great portion of that derived from the amphitheatres of the American hospitals is not much better; and what is obtained, is mostly on chronic diseases, leaving those of an acute character, with which the country practitioner has most to do, almost wholly unnoticed.

"The students, in order to be competent for the great mission in which he is about to be engaged, must come into closer relations with the patient;—feel the pulse, examine the different symptoms, observe the operation of medicine under a competent instructor, and then know the result of the case: otherwise, very little benefit will result from it.

"In a large number of cases presented at the clinics the patient is prescribed for only once or twice in the presence of the class; and often the student knows nothing of the result of the case, or the operation of the medicine prescribed, especially if unfavorable. And in surgical operations, the student being generally seated at a distance, is a mere superficial observer; and as he seldom knows the after treatment, or the result of the case, which is far more important, how can improvement be expected? And, indeed, are not amphitheatre surgical operations sought for and applauded, more for the benefit of the school, and to spread the fame of the surgeon, than for the real advantage of students?

"Such exhibitions are not sufficient to make one an accomplished operator. The dissecting-room is the place for this. There the student may do with the hand what the eye beholds; there he may become familiar with all the parts and tissues of the body, and perform, frequently, the different operations on the cadaver."

In the August No. of the North Western Medical and Surgical Journal, the part of the above extract referring to the American hospitals and the importance as a substitute for hospital teaching, of private, office, and bed-side clinical instruction, is quoted; and the Senior Editor, coupling with this opinion similar sentiments expressed in the report on Medical Education to the National Medical Association for 1853 by the chairman of the committee on that subject, Dr. Z. Pitcher of Detroit, and *adopted by the Association*, objects to these views strongly; stating that the difficulty is not in the *small number* of hospitals in this country, or in the manner in which they are conducted, but in a want of appreciation of the importance to hospital instruction, and in *not sending students to those schools* where they can follow the physician through the wards of such an institution. He says there are plenty of well filled hospitals in many of the cities, not omitting to mention Chicago, where accommodations for instructing every student may be had, who is fitted by previous study to profit by attending them. He admits that in Cincinnati, in Philadelphia,

and other Atlantic cities, where clinical instruction is given only twice a week and when the whole hospital class are expected to attend at the same hour, and are seated in the amphitheatre as in a lecture-room, and *listen* to clinical lectures, and view at a distance surgical operations;—Such instruction gives the student more shadow than substance—is much better calculated to dazzle the eye and satisfy the inexperienced mind by its show, than to impart true skill in diagnosing and treating diseases.

He also admits that in Cincinnati, Philadelphia, &c., if students are admitted into the hospital wards, directly to the bed side of the sick, their number is such that few can personally examine the patients. He doubtless recollects seeing in the New York hospital, from 30 to 60 or more students following a physician or surgeon through the wards, as he hastily walked from one bed to another—the seekers after knowledge, jostling and crowding each other; the tall ones raising upon their tip-toes, and the shorter ones springing upon the backs of their companions, to get a hasty glimpse at the poor patient thus surrounded and pressed upon, and frightened by the throng—and how utterly impossible it usually was to catch the first word spoken by the *Clinical Teachers*. All this he remembers and appreciates, and of course in writing upon the subject, must confess.

But “for the last four years the students of *Rush Medical College*, have had access to the wards of *Mercy Hospital*, (formally called the *Illinois General Hospital*.)”

“During the College term,” the Journal continues, “the wards are under the charge of the Professors of Surgery and Practical Medicine, each of whom devotes an hour every morning, (except Sundays) to the clinical instruction in their respective wards. The students who take the hospital ticket, are divided into two general classes, one of which visits the hospital each morning.

“When there, they subdivide, one half entering the Surgical, and the other half, the Medical wards. When the same general class visits the hospital again, the subdivisions interchange; those who went with the Surgical professor before, now go with the Medical. In this way, each student taking the hospital ticket, visits the hospital, and receive clinical instruction every other day, or three times a week;” that is, each student visits the same ward—has an opportunity to *see* the same patients, (should the patients remain there so long,) three times in two weeks, or at the rate of once and a half a week.

Now it must be remembered, that this is during the *Lecture term* in *Rush Medical College* — a term of *sixteen weeks* — that every day, (Sundays excepted, thanks to the institution of the Christian Sabbath!)

these same students listen in the College to, at least six long lectures, on as many different subjects, besides attending (if indeed they do not entirely neglect it,) to practical anatomy, and recitations to the demonstrator — not to mention the exercises of reading and composition, both very important, but which it is to be presumed must be neglected; and all this performed by a class of students, none of whom have received, or come there with the expectation of receiving any examination as to preliminary education—and some of whom certainly have a very limited stock of knowledge, and less mental discipline.

We will not dwell upon the length of time each young man of the *ninety* who, the Journal says, received instruction last year, will have to make personal examinations of each patient, visited in the hour and a half per week, the subdivision spends in the same wards—nor the amount of knowledge one of these crude minds will be likely to retain by the enundation of medical science, which is poured upon them in so brief a time. To use a homely expression, this flood of knowledge thus poured upon them in the short space of sixteen weeks, must either slide from them like water from a duck's back, or pass through their strained minds like the same unstable fluid through a seive—and this is the system of medical education, which should be sought for, as the Journal suggests, irrespective of "pecuniary considerations" — should be accepted whatever be the price!

This system is indeed sadly at variance with the views of a certain enthusiastic young man, from the same region of Southern Central New York, from which this volume of Transactions emanates, whose vigorous pen some few years ago, in various Medical Journals, and whose earnest tones at Albany, at New York, and at Philadelphia, so sadly for a time, disturbed the slumbers of Medical old Fogydome, and aroused the profession of the whole country to the importance of, and made the welkin ring with "Medical Education and Reform"—which pen and voice, aided by others, called together the great National Medical Association—an organization based upon the principles, and whose voice has even been, (though growing feebler of late,) in favor of thorough preliminary education—of long courses of lectures—of the separation of the licence power from the hands of those who teach, and who have a pecuniary interest in conferring such licenses; and in favor of a high standard of acquirements, general and professional, before admission into our ranks.

But times and circumstances change, and men change with them, at

least in their acts. We have no doubt however, that the editor of the *Journal* entertains similar views now, that he ever has on these subjects; but his connections and associations are such, that he cannot carry out and realize his own ideal. This we regret, but we must wait and hope.

This article has extended to such a length, that we must postpone to another occasion, the more full expression of our views, upon the subject of clinical instruction, and the manner in which it now is, and in which it should be pursued.

Cholera.

This disease has prevailed in so many places, and to such an extent, during the past few months, throughout the country, as to impress us with a fear that it has become one of the diseases which may be considered as belonging to us, and which we may frequently, if not annually expect. In our pages, have been given reliable accounts of its prevalence in Chicago, and Detroit during the season, with something of the circumstances and peculiarities attending its progress in these places, and we hope our cotemporaries throughout the country, will give us similar or more extended histories of its appearance in their several localities. The circumstances which may have been supposed to have acted as *causes*, should be particularly noticed—and medical men everywhere, should be thoroughly acquainted with all the facts bearing upon this point, and should urge upon boards of health and all city authorities, the great importance of seasonable efforts at prevention. In no respect can the condition of our race be materially improved without repeated and constant efforts—"line upon line, and precept upon precept," must be given, and the medical press and profession "should never weary in well doing."—Much may be done for the cause or humanity in this way.

In the September number of the *New York Medical Times*, a report is given of a clinical lecture in the New York Hospital, in which is described two cases of ununited fracture, treated after what the Surgeon (Dr. Markoe) called the method of Dr. Brainard, of Chicago. One of the cases it appears was successful—but Dr. Detmold, a Surgeon of some distinction in that city claims, and as his letter below would seem to show, very justly, a priority in the idea and practice. The operation consists in making several perforations through the ends of the fragments of bone

by a common drill through a single opening in the shin. Dr. Detmold's note to the Editors of the *Medical Times* on the subject published in the October number is as follows:

"New York, Sept. 4th, 1854.

GENTLEMEN:—In the last number of the *Times*, Dr. Markoe in his clinical remarks, speaks of an operation for ununited fracture, and says, "I propose to adopt a plan which was first suggested to us by Dr. Brainard, of Chicago," etc. Now I have no fault to find with the *first* suggestion, but the operation I claim as original and as mine. I performed it successfully four years ago upon a patient who was dismissed from the City Hospital with ununited fracture of the tibia, and presented the case before the New York Academy of Medicine.* In another case, likewise dismissed from the City Hospital, I requested the New York Academy of Medicine to appoint a committee to witness the operation and its results, which was done and reported upon. The first case was referred to, if I mistake not, in the very first number of the *Times*, by one of the Surgeons of the City Hospital, and a slur thrown upon the operation or the operator, I forget which. I have lately conversed with Dr. Brainard on the subject, and convinced him of the priority of my operation.

Very respectfully yours, &c.,

WM. DETMOLD, M. D."

Some time since Dr. Brainard reported as novel, the treatment of the bite of the Rattle Snake with Iodine. A practitioner at Jolliett in Ill. soon after showed that he had reported cases treated successfully by Iodine some time before—and since then it has been proved that another physician in Ill. preceded them both in the published use of the remedy; and we should not be at all surprised if when the noise of this controversy spreads abroad, some other Surgeon comes forward and proves that neither of the contestants is entitled to the claim of originality.

We have indeed, a vague impression that we heard something of a similar operation some years ago, (perhaps it was Dr. Detmold's publication) and shall wait with a degree of curiosity the results of the discussion. The fact that a prize was awarded the essay describing this method, by the National Medical Association in May last, gives the subject additional interest.

Announcement of the Philadelphia College of Medicine.

This announcement is before us. The institution holds two sessions a year, the first commencing Oct. 9th, and the second, on the first Monday in March.

* This case and the operation were reported in several Medical Journals.

In the September number of this Journal, was a circular issued to the Physicians of Michigan, and the adjoining States, requesting them to furnish information of the prevalence of epidemic and other diseases, in their respective localities, in the manner and for the purposes therein specified. We hope the subject will not be overlooked or neglected. Now is the season of the year when sickness is abating, and we hope the brethren will be gathering up the fragments of their summer's experience, that nothing be lost. If you would like to know what has been the experience of others; you must furnish them with your own.

Please aid us in our efforts, (for they are earnest, and we hope will be continued,) for the promotion of Medical knowledge and improvement. Due credit will be given to each contributor.

Address Prof. A. Sager, Ann Arbor, Michigan.

We call attention to the advertisements of J. H. Reed & Co., and Messrs. Brinkerhoof & Penton, of Chicago.

Those of our readers who have occasion to visit that city, will find at Messrs. Reed & Co.'s superb establishment, a full assortment of surgical instruments at the manufacturers' prices, besides seeing the most beautiful and neatly kept drug store they have probably ever beheld.

They will also find Messrs Brinkerhoof & Penton, old and well established Druggists, prepared to furnish them in any quantities, with the materials with which to conquer disease. Dr. Brinkerhoof is a physician, and having many years' practice in his profession in the west, knows well what a western practitioner needs.

We notice in our exchanges that Dr. JOHN P. GRAY, who was some time since appointed superintendent of the Insane Asylum of Michigan, but upon the duties of which office he had not fully entered because of the unfinished condition of the young institution, has been appointed Superintendent of the New York State Lunatic Asylum at Utica.

Whether this latter is regarded as a permanent appointment, and what effect it will have upon his relations with the Michigan Asylum, we are not able to say.

Smithsonian Institute.

A special report on the affairs of this organization is before us, which we will analyze in a future number.

Elkoplasty.

A pamphlet in Prof. Hamilton's happy style. It describes a new mode of treating old, and obstinate ulcers, and also a new method of dressing fractures of the humerus. We will give a synopsis of its contents in our next.

OBITUARY NOTICES.

We notice with much regret the death on the 18th of Sept., of John A. Swett, M. D., Professor of the Institutes and Practice of Medicine in the University Medical School, New York, and Physician of the New York Hospital, aged 46 years.

Dr. Swett was a native of Boston, Mass.; received his Academic education at the University of Cambridge, and studied and graduated in his profession in his native city; and soon after commenced practice in the city of New York, where his active professional life has been spent, having been in practice there since 1831. He has been largely connected with the public medical institutions and societies of New York, has occupied a position in the front rank of the profession, and was particularly distinguished for his knowledge of diseases of the chest. No man in the country, and certainly no one in New York, stood higher in the estimation of the profession in the art of physical diagnosis, and his work on diseases of the chest occupies a high position in the medical literature of this country and of the present day. He also stood high as a lecturer and clinical teacher, and by his amiable social qualities had gathered around him a large circle of friends."

Removed as he was in the full vigor of his manhood, and in the midst of his labors and usefulness, the profession has sustained in his death a severe loss.

Died in New Orleans of Yellow Fever, on the 20th of Sept., Valentine Mott, Jr., M. D., aged 33, son of Prof. Mott, of New York.

Died at Hamilton, Canada West, Sept. 16th, 1854, Dr. Charles Enderlin, a native of Germany, and a distinguished Chemist, aged 41 years.

He arrived from his native country in the United States just four years ago, and although previously, Chemistry as applied to Physiology had received his principal attention, having made important additions to our knowledge in that department; since that time he has for the most part engaged in Agricultural Chemistry and Mining operations—and was on his return to New York, where he had established himself, from a mining excursion in Canada, when he was suddenly seized with a congestion of the brain which speedily terminated his life. The loss of any of the eminently scientific men of Europe who find a more abundant and congenial field for their labors in this country must be a subject of public regret.

We learn with great regret the death of our esteemed subscriber, Dr. A. Murray, of Niles, Mich., by cholera. Dr. Murray was Vice-President of the Michigan State Medical Society, and a member of the Committee on Medical Education, of the American Medical Association.

The physicians of this State have reason to regret bitterly the loss of a man so active, and one who was doing so much to advance the honor and welfare of the profession. Such men can ill be spared from the wide spheres of influence which they fill.

MSCELLANEOUS.

Opening of the Blockley Hospital, or County Alms House, Philadelphia, for Clinical Instruction.

This extensive institution which for several years past has been closed to clinical instruction, has recently, by the action of the "Guardians of the Poor," who have it under their control, been opened for such purposes.

We doubt not it may be made very useful to medical students who may go to Philadelphia for the principal or sole purpose of attending clinical and hospital instruction—but as a means of benefitting those in attendance upon the lectures in the medical colleges, where from five to seven hours are occupied with oral instruction during the day, besides dissections, private examinations, &c., not to mention the importance of reading books, writing essays, and other more independent exercises, it must be useless. The idea of taking these students in large numbers, thus occupied, some three miles to this institution—of hurrying them through the wards, or attempting to impart useful instruction to them in the clinical amphitheatre, and that too, before they are half instructed in general principles and elementary branches, is exceedingly absurd. We are, however, rejoiced that Blockley Hospital is open for clinical instruction—and hope that when more philosophical views prevail on the subject of medical education, this institution and all others of the like kind will be well filled during the interim of the lecture terms in the colleges with advanced students, and at all times by young graduates who wish to perfect themselves in every department of the profession. In saying this we do not overlook the *superior* importance of the student's watching at the bed-side of the sick under an enlightened physician in private practice, the daily course of disease and the operation of medicines.

Drs. Henry H. Smith and D. H. Agnew, are the consulting surgeons; and Drs. John L. Ludlow and Caspar Morris, the consulting physicians. Dr. Campbell is the chief resident physician.

Indiana Medical Journal.—This Journal, of which one number only has appeared, will not be continued.—*Phil. Med. News.*

Yellow Fever.—We regret to notice the ravages of Yellow Fever in a considerable number of our Southern cities. In Galveston, New Orleans, Savannah, Augusta and Charleston, as well as at other points, the disease has prevailed to a considerable extent, and with its accustomed mortality.

Resuscitation of an Asphyxiated Infant.—Dr. Sayre narrated a case illustrating the beneficial effects of artificial respiration in the management of asphyxiated new-born infants. The child in this instance was born at half past twelve o'clock. By passing a tenaculum through the tongue and drawing it out, he succeeded in passing a male catheter into the larynx, and by ten minutes to three, respiration was established, and the cord from which no blood had as yet escaped, was ligated. The child lived three days and died in convulsions.—*N. Y. Jour. of Med.*

Chloroform Vapor in Tenesmus.—Ehrenreich relieves the tenesmus of dysentery by the vapor of chloroform passed into the bowels through a syringe and common canula.—*N. Y. Jour. of Med.*

Belladonna in Salivation.—Erpenbeck used the extract of belladonna gr. i j ss. in an emulsion in 24 hours with perfect relief.—*N. Y. Jour. of Med.*

Glycerine in Dandriff.—Mr. Shaw of Middlesex Hospital, uses glycerine in pityriasis of the scalp, in the form of an oil mixed with an agreeable perfume.—*N. Y. Jour. of Med.*

Nævus.—Dr. Cumming advises to apply a compound of 15 grains of tartar emetic to 3 i of galbanum plaster on a piece of thin leather, cut accurately to the size of the tumor. Inflammatory action is set up and the vessel obliterated.—*N. Y. Jour. of Med.*

Phthisis, Diarrhæa of. Dr. T. Thompson.—Gives five grains of tris-nitrate of bismuth combined with three grains of gum arabic, and two of magnesia, every four or six hours.—*N. Y. Jour. of Med.*

Night perspirations.—Give four grains of oxide of zinc, and four grains of extract of hyosciamus, made into two pills, every night for a time.—*N. Y. Jour. of Med.*

Suits for Mal-Practice.—In a recent article, we predicted that suits for *mal praxis* in treating broken bones would soon cease, because the investigations of Prof. Hamilton in Buffalo, on the subject, had proved that in reality few fractures recovered without some deformity, be the treatment what it may. Prof. Dixie Crosby of New Hampshire, had a verdict of \$800 rendered against him in an action for alleged mal-practice in healing a broken os femoris. A superior court has just *reversed this decision*, whereupon Prof. Peaslee of the same State, declares that not less than *forty suits* would have commenced in Vermont alone, had the verdict made a year ago been confirmed. What a *capital business practice of surgery* might have been in Yankeedom, but for this verdict, and the investigations of Prof. Hamilton.—*Dr. Rowland.*

Nitric Acid as an Anti-Periodic—Prof. Mendenhall, of Cincinnati, says in the Western Lancet, his attention has been led to the use of nitric acid as a substitute for quinine in intermittent fever, by the inaugural thesis of Dr. Bailey of Emmetsville, Indiana. It is given in five to eight drops diluted in water, once in six hours, without regard to the paroxysms.—*Nashville Med. Journal.*

To prevent Night-sweats in Phthisis.—Night perspirations in the course of phthisis are often extremely annoying to the patient; they appear, also, to be simply debilitating, and unattended by any degree of collateral benefit. Some cases which were carefully noted by Mr. Hutchinson, the Clinical Assistant at the City Hospital for Chest Diseases, with a view to the determination of that question, appeared to show that they may be artificially checked, not only with impunity, but with great benefit. The patients who were so treated, and who, in the course of a week or a fortnight, got quite rid of sweatings, which for months had been profuse, thought themselves much better, and did not complain of increase, either as regards the expectoration, the feverishness, or the sense

of stuffing in the chest. Under the usual treatment of phthisis, (full diet, cod-liver oil, and tonics,) the tendency to night perspirations often ceases spontaneously. If it becomes desirable to expedite the process, it may be done by the sesquichloride of iron, the mineral acids, or best of all, by the gallic acid. The following is the prescription for a night draught containing the latter:—

℞ Acidi gallici. gr. vii.;
Morph. acet. gr. $\frac{1}{8}$;
Alcohol q. s. (a few drops);
Syr. tolutan. ℥ss;
Aquæ ℥j.

The night-pill, as we find in the Pharmacopœia of the Brompton Hospital for consumption, is—

℞ Acid. gallic. gr. v.;
Morph. hydrochl. gr. $\frac{1}{8}$;
Mist. acac. q. s. Ft. pil. ij.

It is also of advantage to adopt an astringent regimen as far as convenient. The patient should be directed to sleep on a mattress, and not heavily clothed; he should wear no flannel in bed; as dry a diet should be taken as conveniently can be borne, and fluid should be especially avoided in the latter half of the day, none whatever being allowed later than several hours before bed-time.—*London Medical Times*.

Poisoned Confectionary.—The “Lancet’s Analytical Sanitary Commission” gives the following summary of 101 analyses of colored confectionery, of the sugar-plum and sweetmeat order. The colors were given by various substances—e. g.:

Yellows—In 59 samples, the color was given by varieties of chromate of lead; and in 11, by gamboge.

Reds—In 60, this color was derived from cochineal; in 12, from red lead; in 6, from bisulphuret of mercury.

Browns—8 were colored with brown ferruginous earths.

Purples—2 were colored with a mixture of Prussian blue and (probably) cochineal.

Blues—1 was colored with indigo; 21 with Prussian or Antwerp blue; 15 with German or artificial ultramarine, a sulphuret of sodium and aluminium.

Greens—10 samples were colored with varieties of Brunswick green, a mixture of Prussian blue and chromate of lead; 1 was colored with carbonate of copper; 9 with Scheele’s green, or arsenite of copper.

Several of these coloring ingredients were variously combined in some samples. In all the cake ornaments, the colors used were painted on with carbonate of lead.

The majority of the above coloring matters are among virulent or deadly poisons. The quantity is not in all cases so small as supposed, as proved by instances frequently occurring of disease, and even death, following upon their ingestion; moreover, it must be borne in mind, that the effects of lead, mercury, and arsenic, are cumulative.

In France, Belgium, and Switzerland, the employment of poisonous

coloring-matters in articles of confectionery is penal; and the venders are held responsible for all accidents which may be occasioned thereby.—*Lancet*, May 26th.

Iodine as a Topical application.—The topical application of this remedy is becoming very general in London. The following is the formula: \mathcal{R} Iodinii \mathfrak{z} j., sp. vini rect. \mathfrak{z} j.; ft. solutio. It is better to keep this some time before using. It should be applied in glandular affections beyond and around the enlarged parts, so that the absorbed fluid may be carried through the gland by the lymphatic vessels. It is used topically, 1st, in pleuritic and neuralgic stitches; 2nd, to the throat in cases of aphonia or hoarseness; 3rd, to the mucous lining of the throat itself in cases of congestion and of enlargement of the tonsils; 4th, around the external parts of the eye, in cases of strumous inflammation; 5th, in all forms of periostitis, whether syphilitic or strumous; 6th, in glandular affections as above mentioned; 7th, as injections into cysts and cavities of abscesses, provoking adhesive, but not suppurative inflammation, as in hydrocele.—*Med. Times and Gazette*.

Division of the Mucous Membrane to cure Fissures of the Rectum.—Mr. Quain, in his recent work on Diseases of the Rectum, states that while performing Boyer's operation, viz: division of the sphincter ani for fissure of the rectum, his patient moved so that the bistoury only divided the skin and mucous membrane. In watching the effects of this simple operation, he found the success was complete and the patient cured. In claiming this agreeable modification in the treatment of fissures of the rectum, he subsequently found he had been anticipated in it by Sir Benj. Brodie.—*Nashville Journal*.

Mounsey's Preston Salts.—The following directions for making this preparation are taken from the London Pharm. Journal, viz:

Take of True oil of cloves,
English oil of lavender, of each - a drachm
Oil of Bergamot, - - - - - five drachms,
Strongest solution of ammonia, (sp. gr. 880) one pint.

Mix these together. The bottles are then to be half filled with rough carbonate of ammonia, and filled up with the carbonate in fine powder. The salt is then saturated with the above solution, and corked closely.—*Boston Med. Jour.*

Diagnostic sign of Choleraic Diarrhœa.—The New York Academy of Medicine calls attention to the fact, that the diarrhœa of epidemic Cholera is always *painless*, while that of common Cholera is more or less painful.—*Nashville Journal*.

Which slays the most soldiers, Disease or the Sword?—Civilians think that shot kills the most soldiers, but Colonel Queach, who served throughout the Peninsular campaigns with the old 95th Rifles, says that 40,000 men were killed in action, or died of wounds. 120,000 died of disease, a great deal of which was rendered fatal by the want of proper medical attendance; while 120,000 more were by disease rendered unfit for service.—*London Lancet*.

Of these 240,000, how many did alcohol slay?

A New Mode of Plugging the Nostrils in Epistaxis.—M. Leydet proposes to plug the nostrils in cases of obstinate epistaxis by introducing (by means of a piece of elastic bougie,) a small bladder or a bag of intestine, into the nostril, and by then inflating the bladder or bag until it is made to fill accurately the whole of the nasal fossa. The opening through which the inflation is made is provided with a screw to prevent the escape of air. For convenience of inflation, it is also recommended that there should be a piece of elastic tubing attached to the opening.—*Psychological Inquiries.*

Depilatories.—Dr. Bazin, in his work on the researches into the nature and treatment of tenia, recommends to remove the hair from the scalp by the oil of cade, or by the ointment made with lime and carbonate of soda, of each 1 part; lard 30 parts.—*Nashville Med. Jour.*

Vaccination as a Safe and Efficient Prophylactic.—If there be one man in the profession who doubts the efficiency of vaccination, let him read the following extracts from a report made by Dr. Seaton, to the Epidemiological Society of Great Britain.

“We are ourselves satisfied, and it is the concurrent and unanimous testimony of nearly 2000 medical men, with whom we have been in correspondence, that vaccination is a perfectly safe and efficient prophylactic against this disease;

“This proposition we hold to be proved—

“1. By the general immunity with which it is found that those who have been vaccinated can mingle with small pox patients, a fact so familiar that we do not feel that we need adduce any illustration of it.

“2. By the gradual decrease which has taken place in the mortality from small pox, as compared with the mortality from all causes, since vaccination has been introduced and been generally received. This is illustrated in the following tables:—

“(A.) Table showing the average of deaths from small pox out of every 1000 deaths from all causes, within the bills of mortality, for decennial periods, during the last half of the last century (the half century preceding vaccination.)

For the 10 years ending 1760	-	-	-	100
“ “ 1770	-	-	-	108
“ “ 1780	-	-	-	98
“ “ 1790	-	-	-	87
“ “ 1800	-	-	-	88

“(B.) Table showing the average of death from small pox out of every 1000 deaths from all causes, within the bills of mortality, for decennial periods, during the first half of the present century (the half century succeeding the introduction of vaccination.)

For the 10 years ending 1810	-	-	-	64
“ “ 1820	-	-	-	42
“ “ 1830	-	-	-	32
“ “ 1840	-	-	-	23
“ “ 1850	-	-	-	16

—*Psychological Inquiries.*



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THE

PENINSULAR

JOURNAL OF MEDICINE AND THE COLLATERAL SCIENCES.

VOL. II.

DECEMBER, 1854.

NO. VI.

ORIGINAL COMMUNICATIONS.

ART. I.—*Legislation on Medical Interests.*

MESSRS. EDITORS:—The question has often been mooted in the section of the State in which I live, whether the Legislature of the coming winter ought not to be applied to, for the passage of an act to protect the people from the impositions of quacks. Many physicians and also laymen, are of the opinion that this should be done, and urge immediate action of the profession for the purpose of securing the object.

They urge that quacks of all sorts abound, often so nicely fitted out in the manner and fashion of physicians that a stranger who may be taken sick in a place where he is not acquainted, runs the greatest risk of falling into the hands of a perfect vampire, when he supposes he has employed a regular practitioner. The quackery of to-day is not the quackery of five years ago. Then the empiric boldly declared war against the profession; published abroad his opposition to it, and in his advertisements his puffs, and in his very sign-board, took particular pains that no one should mistake him for a regular physician. He trusted to his opposition to make a noise and gain eclat; consequently those who employed him did so with their eyes wide open; but now the quack is fain to pass himself off for *X. Y. So-and-so, Physician and Surgeon*: very gently and modestly hinting in proper quarters that he is regularly educated, and thoroughly experienced in all regular practice, and in addition

has made some grand advances and discoveries which place him far above others. He thinks the "old line" practitioners are very good sort of men, quite useful in a small way, but bless him! they don't come up to the times; he would fain have you believe that he is a profound progressive young America sky-rocket, a tube of the old school filled with the powder of new improvements which is to propel him across the midnight sky of the 19th century, to the astonishment of all nations.

In all this style of bombast, the fact of his not being a recognized physician, is kept vastly more in the back-ground than it used to be, so that I have known men who openly passed for quacks among some parts of their ride, where quacks were in demand, to mount their gigs and drive into the opposite part of the township as regulars, and even to palm themselves off on physicians of neighboring places as such, so as to induce them to meet them in council. People are now imposed upon by men falsely pretending to be regulars; hence it is contended that the law ought to require of them the possession of proper credentials or else suppress their practice.

This argument is very conclusive that quackery *ought* to be suppressed, but not quite so clear that they *can* be by law, and there are several reasons for not attempting it at present. In the first place we have had considerable experience with legislative action on this subject, and we have generally found that what one legislature passed, the next repealed.

We have had two or three generations of state medical societies created and destroyed by the powers at the capital, besides sundry enactments for putting a stop to irregular practice, which were passed and repealed in rapid succession. Now it would be worse than useless to have a law however good in itself which we could not rely upon as permanent. If it is passed this winter, and has a probability, according to previous experience, of being repealed two years hence, it would only be a source of ridicule. But even if it were permanent, it would not be advisable. If a quack is prosecuted, depend upon it, it will bring him into notice, and increase his practise four fold. Then there is "a glorious uncertainty in the law," a maxim which is far more true than the much talked of uncertainty of medicine, and in these loose days, it would be curious if he did not slip out of your clutches and defy you.

There is another objection which I have, and that is that seeking for such a law tends to induce physicians to cease their personal efforts for the upbuilding of the profession, and trust to the broken reed of legisla-

tive protection. At present practitioners are fully aware that if we have a compact organized and victorious profession, we must construct it, and defend it by the might of our own right arms; accordingly we have gone to work like men on the voluntary system. We have by personal exertions established a State Society whose vitality is in itself, and not in the law. We have District Societies on the same basis, and a Medical Journal also. All these things we have built up by our own power. We did not receive them from the legislature, and we defy any future legislature to destroy them. The fact is, we have at last hit on the true foundation of success, *voluntary association of mind*, and *individualism in combination*. Where it is proposed to root out any evil which has fastened itself on society, this is the only way to succeed. We have already made a great advance. Quackery in many places begins to skulk into corners: the people are beginning to learn that there is a body of learned and intelligent men at work in concert all over the State, and the consequence is, we to-day stand in a higher and more dignified position than we have done for years. The effect of what we have already done is plain from the fact that our enemies are losing their blustering, hostile air, and instead of waging open war, begin to sneak around the camp to steal our uniforms. Now instead of diverting our attention to the futile pursuit of legislative assistance, let us go on as we have begun, and help ourselves. I predict that the day which sees the physicians of Michigan thoroughly organized and energized will see the last of open quackery. The fact is we can crush this evil just as easily as we can turn our hands, and all the quacks in the Peninsula combined, cannot save themselves. As for the legislature, nothing that it can do will materially help or hinder us at present.

In some future time, when we have thoroughly threshed quackery to pieces, and shown the powers above that we are perfectly competent to chastise our enemies, and that we intend to do it henceforth, for aye, it may be well to clinch the matter by a good strong law, but at present it is not advisable.

There is, however, one thing which it will be well to do as soon as possible, and that is to obtain charters for four State and District Societies. Under the present constitution of the State, the legislature is prohibited from giving special charters, but during the coming session there will undoubtedly be passed a general law under which charters may be obtained from the proper officers without resorting to the lobby of the

capitol. There can be no objection to taking that mode of giving a permanent form to our voluntary associations. X.

ART. II.—*New Plants discovered in Minnesota.* By J. C. NORTON, M. D.

Phacelia tenera, (mibi), stem upright, slender, sparsely bristled; leaves petioled, pinnatifid, divisions ovate, oblong, obtuse; those of the lower leaves entire; those of the upper about three lobed; racemes few flowered, pedicels longer than the calyx; lobes of the calyx lanceolate acutish, bristly ciliate; corolla rather longer than the calyx, tube with ten folds inside, enclosing the stamens, lobes emarginate, flower white with dark purple specks inside, ovary strongly bearded; moist shady places along the Mississippi, May, plant four to eight inches high with small and delicate flowers.

Galium triflorum, (Gray), stem weak, reclining or prostrate, bristly roughened backwards, on the angles, shining, leaves 6 in a whorl, elliptical lanceolate, bristly pointed, with slightly roughened margin, peduncles 3 flowered, the flowers all pedicelled, fruit bristly with hooked hairs, lobes of the greenish corolla pointed. Var *purpureum* (mibi) whole plant rougher, corolla dark brownish purple, emitting a very offensive odor.

ART. III.—*Tattooing for Nævi Materni.*

Various savage nations, it is well known, are in the habit of tattooing fantastic figures on the skin. They do this by making superficial cuts in the skin in the form of the desired figure. Into these they rub either gunpowder or some other black coloring substance. The scratches heal, but their position is marked by black lines which are never effaced. A similar practice prevails among our sailors. They do not cut the skin but prick it with needles, in the form of an anchor, or whatever figure they wish to produce. They then rub India ink into the punctures, which leaves a permanent mark. What other substances are used I am not informed, but I believe that all the black tattooing is produced either with

India ink or some other form of carbonaceous matter. On considering this subject, I had some curiosity to ascertain whether the particles of carbon thus inserted into the tissues become encysted, as bullets do, which remain permanently in the flesh, or whether foreign substances of appreciable size may exist in the tissues without irritation, and without the protection of a cyst. Having cut a thin section from the skin of a cadaver which had been tattooed, I placed it under the microscope (using a high power.) The coloring matter was found to lie loose in the substance of the skin, not encysted at all but simply scattered in masses and granules among the threads of white and yellow fibrous tissue. Some of the patches were ten or twenty times as large in diameter as the thickness of a fibre of elastic fibrous tissue. Scattered around these patches were loose granules, some of them as small as half the diameter of a yellow fibre. Every particle was apparently unchanged, being perfectly black and opaque, and in the minutest portions showing no translucency. There appeared to be no signs of absorption, for the fibres in contact with the granules were not in the least stained with thuy or in any way altered in their appearance; nor was there any appearance to the naked eye or the microscope of any irritation or disorder resulting from the presence of the foreign substance. Sailors cover considerable portions of skin with fanciful ornaments of this kind, and I am not aware that they suffer any inconvenience from it.

It is well known that something similar to tattooing sometimes occurs in treating inflamed eyes with solution of acetate of lead. If there is an abrasion on the cornea, an insoluble compound of lead may be precipitated and imbedded there, forming a white spot which is never absorbed. There is also a red tattoo used sometimes by sailors, but I do not know its composition.

Since, therefore, it is possible to change the color of the skin, by this mode, to black, red, or white, in a permanent manner, and without any injury whatever to the patient, beyond the pain of the punctures, what should hinder from removing the *nævi materni*, which disfigure the faces of so many persons by this means. The operation has been proposed by Frankel, but I cannot learn that it has been fairly and thoroughly put to the test. Any insoluble white pigment might perhaps do. For instance, some compound of lead, such as is found in the coats of the eye, as above referred to; or sulphate of baryta might be used. Probably the best way to introduce the latter substance would be to make the punctures

first, then wash the skin thoroughly with chloride of barium. When this solution has worked its way among the fibres of the dermis, follow it in the same way with a wash of sulphate of magnesia. Wherever the latter fluid followed the chloride an insoluble sulphate of baryta would be precipitated, which would probably remain like the coloring matter of other tattoo marks, a permanent tint, only white like the spots formed by lead in the eye. I see no reason why this should not be successful, and if it were, the *nævi materni*, particularly those of a red tint might, by skillful proportioning of the amount of pigment, be changed to a most accurate imitation of the whiter parts of the skin. Probably moles might be whitened in the same way with still more ease, by as much as they are smaller. As the operation of puncturing is so completely superficial, probably the anæsthetic effects of cold might be employed to save the patient the annoyance of the pain. X.

ART. IV.—*Congestion of Brain in Cholera. Its Etiology, Diagnosis and Treatment.* A paper read before the Buffalo Medical Association, Oct. 3d 1854. By JAMES M. NEWMAN, M. D. Health Physician.

The above is the title of a pamphlet of 25 pages, which we find on our table, and which we have looked over with interest. The author, as the Health Physician of Buffalo, has had an opportunity of witnessing Cholera in its different forms and stages, and particularly in seeing cases of congestion of the brain, as the consequence of the latter stage of the disease, in those brought into the Hospital, and placed under his care.

Having had a similar experience, as city Physician of Chicago in 1852, we recognize his description of cases as, in the main, correct representations of very familiar objects. Unlike some who write upon disease, he has evidently observed with considerable care.

He says there is a class of cases which never present the sunken countenance generally seen in cholera, preserving a degree of fulness and color of the face throughout, and as soon as reaction is established, a bright, if not ruddy complexion of the patient seems to contradict the idea that a few hours before, they were at the very mouth of the grave.

This redness of course, is not natural, is produced by a minute injection of the small cutaneous vessels, resembling that caused by the immoderate use of alcoholic stimulants, and is more or less persistent.

The eyes at the same time are more or less injected—and the degree of injection of the eyes, marks the severity of the case, and the tendency to a fatal termination from congestion of the brain. The conjunctives in some cases are injected in their lower halves only, [a circumstance we have often noticed,] that portion covered by the upper lids remaining clear.

Often in these cases the vomiting and purging continues—or if checked returns again, and the matters evacuated from the stomach, are commonly yellow or green, while those from the bowels vary much in character, often dark and offensive. Sometimes, however, the discharges continue under these circumstances of congestion, of a rice water character. But this is the case, more frequently, where there has been a partial convalescence, and the increase of symptoms partakes of the character of a second attack of Cholera.

As the vomiting and diarrhoea continue, [and according to our observation, often when these discharges do not continue,] the strength wanes; the color of the face deepens or extends in surface; the eyes are more and more injected; the patient becomes drowsy and inclines to sleep; [frequently become restless and disposed to get out of bed, &c., is wandering in mind when left to himself;] the stupor gradually increases, and finally profound coma becomes established, terminating in death, or recovery after long treatment and a tedious convalescence.

Dr. N. seems to think much of these appearances of the face and eyes as diagnostic signs of a strong tendency to, or an actual existence of congestion of the brain, and as affording an index to our course of treatment; and in this we think he is right.

He thinks the vomiting which continues under this state of things, is entirely owing to the congested or inflamed condition of the brain.

That this symptom is owing in a great measure to this condition of the brain, we have no doubt; but we also believe, indeed we know, that the mucous membrane of the stomach and bowels, is, co-existent with this state of the brain, often congested and inflamed, and the vomiting as well as purging is often owing to this condition of that membrane. Post-mortem examinations have everywhere revealed this fact, as to pathological conditions; a state of things which our author has seemed to overlook in his more careful attention to the condition of the brain.

With his views of the pathological condition of this stage of cholera, he proceeds to consider the indications of treatment. He very justly observes, "I fear there has been not a little error committed, from regarding this

condition as differing in no particular from cholera, [we suppose he means in its other stages,] or indicating no modified treatment, except as considering it merely a very intractable case, requiring a marshalling of our forces in greater array and strength." Indeed, we have not the slightest doubt but that this, not properly distinguishing between the different stages and different conditions in cholera, is the *great error of the profession* on the subject, and is the source of much of the want of success, and the diversities of opinion of treatment which prevail.

Cholera is a disease though brief in its duration, yet presenting as great a variety of conditions and stages in its progress as most diseases, and requiring as great a variety of treatment to meet the different indications presented in the various stages and conditions, as in many diseases of a much longer duration.

For instance, we hear much about the *opium treatment* in cholera—some approving and others condemning. Now the fact is, there is a *condition* and stage in Cholera, where opium is the great and essential remedy. There is another *condition* and *stage* in cholera, where any considerable *quantity* will almost certainly *prove fatal*. In the early stage of the active disease, when the prominent symptoms are the irritation of the stomach and bowels and the pouring off of Serum, &c., and before the *blue stage*—the deficient oxygenation of the blood, and the congestion of the brain &c., have occurred, opium is demanded most imperatively. These latter results may generally be anticipated and prevented by its timely use in proper combination; whereas after these conditions have occurred, when the respiration is almost suspended, the blood is loaded with carbon, the brain is stupified, perhaps congested with black blood; the free administration of an article whose physiological effects are similar to these, seals the fate of the patient. We speak now not of this particular condition of congestion and inflammation of the brain, the occasional result of cholera, but of the ordinary forms of the disease. And the difficulties of the case consist in the rapidity of its progress from one stage to another, and the skill of the physician is manifested in detecting and judging of the conditions, and the time and manner of using the remedy, and the amount that may safely be borne.

But we are wandering from our pamphlet.

Dr. Newman justly observes of the condition of disease under consideration—"We have a brain affection to treat, sufficiently serious to destroy our patient," and he farther seems to think that the stomach disease now

ceases. This may or may, not be the case—very often the stomach, the brain and the spinal marrow are diseased at the same time, and in the same manner; viz: are congested and inflamed, affected with a peculiar low form of congestive inflammation—and both may require, and *do* require attention. Where, however, the disease of the brain is predominant, this organ should receive particular attention—and here, he says: “Opium and its compounds cease to be safe remedies, and must be altogether abandoned.” This statement is, perhaps, correct as a general proposition—but there may be conditions in low inflammations of the brain, and especially when other diseased conditions are present in the system, which may tolerate, or even require opium or some of its compounds. Indeed in complicated cases of this character, we have often found it necessary, while paying great attention to the head symptoms, to restrain the excessive action of the bowels by anodyne and astringent enemata; and sometimes the brain even is benefited by quieting the general irritation of the system, and putting that organ as it were in splints by an anodyne. We are not, however, disposed to quarrel with Dr. Newman’s general statements. Opium in these grave affections of the brain, is generally contra-indicated. We fully agree with the following statement: “Calomel becomes an important article of our materia medica. Shaving the head and the application of cold; local bleeding by cups or leeches, all are indicated. Stimulants and tonics are to be given gradually and watchfully. We must support and strengthen our patient without goading the brain, and pumping into its already repleted sluggish channels, a still larger supply of blood.”

These, of course, are general statements, the particular treatment to be modified according to circumstances. Blisters he speaks of with reserve, but as applicable under some circumstances. We have often derived much benefit from them. Another article we have used with much effect when the brain was principally at fault, which he does not mention in this connexion, though in the reported cases which follow we see it used, is Iodide of Potassium. This, where the stomach and bowels will bear it we give in full doses.

Twelve cases illustrative of the diseased condition in question, and of his views of treatment are detailed with distinctness and precision.

He regards the term Typhus, or Typhoid Fever, applied to this condition of cholera as a misnomer. If by these terms is meant a genuine Typhoid or Typhus Fever, dependent upon the causes which generally

produce those diseases, and marked by all their symptoms, of course, it is all wrong. But if the meaning is a condition resembling the Typhoid state these terms may be used.

Dr. Newman says he has often been asked whether the treatment with opium had anything to do in producing this congestion of the brain, and answers in the negative. How it may have been in the particular cases under his treatment, we of course cannot say. This form of disease certainly sometimes occurs where no treatment at all has been used; but that a free and injudicious opium treatment, increases that tendency, there can be no doubt. Both reason and experience confirm this view.

By far the greatest number of cases which have come under our observation, have been produced or made much more serious by the use of stimulants, particularly alcoholic stimulants, in the early or active stages of the disease. On this subject we cannot be mistaken. Having charge of the cholera Hospital in Chicago, during the prevalence of the disease in 1852, and seeing very many of the poor and others, at their own homes, who had been under the treatment of other physicians, and the treatment of themselves and neighbors; we had an opportunity of witnessing the effects of different modes; and, certainly, a very large proportion, nearly all who manifested these symptoms had received stimulating treatment. During the last season in Chicago, there was more tendency to congestion and inflammations of the stomach and bowels, and these organs were more generally affected in those who had received stimulating treatment. During both seasons, of those treated with mercurials, salines, and opium carefully, very few indeed, had congestion of the brain.

Dr. Newman speaks in strong terms of the therapeutical effects of cold applied to the head in cholera, and whenever there is this tendency to congestion of the brain as so frequently occurs, too much cannot well be said in its favor. He thinks well of it, and not without reason in other cases of the disease.

On the whole, we have been much pleased with Dr. N.'s pamphlet, and regard it as belonging to a class of works based upon experience, and devoted to the illustration of particular points in Pathology and therapeutics, especially calculated to do good.

A. B. P.

SELECTIONS.

From the Boston Medical and Surgical Journal.

The Case of a lady in a Sugar-house, with Aphonic, Hæmorrhagic, Tubercular, Phthisis in the softening stage. By SAMUEL A. CARTWRIGHT, M. D., New Orleans.

In the autumn of 1853, before the disappearance of the terrible epidemic yellow fever which afflicted the inhabitants of the lower Mississippi so severely, although it had nearly disappeared from the city, I received a note, stating that Miss S., formerly of Philadelphia, and a patient of Dr. T., of Ohio, wished to see me at the Franklin House, on Canal street. The first glimpse of the patient was sufficient to convince me that she was in the second or softening, if not in the last stage of consumption. She could not speak above a hoarse whisper, and used a white slate to communicate with those around her. There was well-marked flattening under both clavicles, showing that chronic changes had occurred in the apices. She was much emaciated, particularly about the muscles of the chest and arms, and had lost about one-fourth of her weight, as was subsequently ascertained. She had pain and distressing sensations within the thorax nearly all the time, and occasionally intercostal neuralgia was superadded thereto. She had a distressing cough, particularly in the morning and evening, with expectoration—sputa viscous, containing white spots, and she said was sometimes dotted red instead of being pearly. For about eighteen months had had a permanent weakness and hoarseness of the voice—respiration jerking—pulse frequent. For many months had had streaked or tinged sputa—bloody matter, as she called it. This had been preceded by several attacks of copious hæmoptysis of florid blood. The hæmoptysis, she informed me, did not occur until after the first auscultation, and was preceded by yellow expectoration. Dulness under the clavicles and dry crepitant rattle were the physical signs when first ausculted. She said the doctor compared it to the crackling of sparks of fire when dry brush is burning. It was heard in the summit of both lungs. It is scarcely necessary to add, that it indicated unsoftened tubercle, and had nothing to do with the passing of air through mucus in the bronchial tubes, as this sound is produced external to the cells. There was no humid crepitation until after the occurrence of the hæmoptysis. She said she had always been subject to a slight cough on exposure; that for some years preceding her chest complaint she had had chronic diarrhœa, and would have supposed that checking it had caused the pulmonay disease, if a considerable interval had not elapsed between

the cure of the one and the attack of the other. She did not know that chronic diarrhoea, without evident cause, occurring in a young person, is regarded by Louis as an evidence of tubercles.

Taking all the symptoms together, the diagnosis was consumption with tubercular softening. The prescriptions of her former physicians—counter-irritants to the chest, prussic acid, cod-liver oil, and the like—plainly showed that they regarded it as a case of confirmed phthisis. They also told her so. One of them thought the last stage had come. None of them favored the idea of her leaving home with any expectation of getting well. Her mental faculties were clear, and yet she was so hopeful, that notwithstanding every discouragement she set out for the South, determined to try the sugar-house cure. On arriving at Memphis, the company with her would go no further on account of the reports of cholera and yellow fever in all the lower stem of the Mississippi. She resolutely concluded to come the balance of the journey alone—had tried on the way to get into a sugar-house, without success. She spoke French and had letters of recommendation from eminent persons in Philadelphia, Ohio and Kentucky; but being unknown to the French planters, where she happened to stop, they availed her nothing. She left home under the mistaken impression that there were boarding houses on or near some of the sugar-houses, where strangers could board and inhale the vapor. She desired me, if possible, to procure her a situation in one, if there were any such. I knew of none. I also gave her to understand that her case was not one which came within the class of those in which I had any certain experience of the good effects of the inhalation of the vapor of boiling cane-juice.

Having come so far, she said, she was determined to try it, at any rate, if she could possibly get admittance into a sugar-house. I explained to her the difficulty of procuring a suitable place; that the planters were generally in a state of alarm for fear of yellow fever and cholera—regarded by them as contagious—and were disinclined to receive strangers on that account. I finally recommended her to a boarding-house on Lake Borgne, kept by a very quiet and respectable woman, who was well acquainted with the neighboring planters living on the road from Lake Borgne to the city, about twenty-eight miles, passing through the battleground and over the territory occupied by the British army in the winter of 1814 and 1815, while their ships lay at anchor in the mouth of the Lake. Thither she went. Soon the elderly matron, who kept the boarding-house on Lake Borgne, got very tired of having to put on her spectacles so often to read the notes of the Philadelphia lady, who had become a boarder in her house. As she could not talk above a hoarse whisper, she had to communicate her wants and wishes to the landlady by writing. The landlady getting out of all patience, implored a neighboring planter to take her boarder to his sugar-house. I had informed her, that if she *would go* into a sugar-house, she was to be the *doctor* and I would be the *pupil*, and expected her to give me lessons.

I heard nothing more from her for five weeks—not knowing what

plantation she had gone to, On inquiring of her merchant, to whom she had brought a letter of credit, he could give no information—but supposed, from what the landlady said, that she had sunk under the disease, as he had heard nothing from her for more than a month. Ascertaining that she was at Mr. W.'s plantation, I wrote to her by special messenger, as there was no intercourse with the city, and no other means of communicating with her—no post office facilities—and soon received her reply. She said she thought she must be at the “jumping off place,” from the impossibility of communicating by letter with her friends—mine being the first one she had received for five weeks. She proceeds to say:—

“I think I could make you *hear me speak now*, for I am talking as loud as anybody, and without pain or effort at the time, though I feel soreness *after* speaking, if I made too free use of my newly-recovered power. As to my cough, *it has left me entirely*—save a little hacking, when the cold air comes too suddenly in contact with my lungs. Just this little hack, occurring very seldom, puts me in such mortal pain that I take much care to avoid it. Had my cough continued longer, I could not have been so well as I am now, if alive at all, for it was like tearing away my lungs. My first bleeding came on after a twenty-four hours incessant coughing. The blood had in my mouth a hot taste. For the first few days I tried the vapor, I brought up very freely and without the least pain a quantity of frothy and other indescribable matter—but have scarcely had an expectoration for above two weeks. Occasionally a little yellowish spit reminds me of the contrast between now and *what has been*. As to the process of *inhaling*, it is the most heavenly, earthly delight I ever knew! The vapor is both most deliciously penetrating and most penetratingly delicious; hot and searching; and it forces its way, or seems to, through all the bronchial tubes, opening and giving them new life and action. It is my nature to be thorough in everything I do, and to do it with all my might. I could not get the vapor strong enough, standing or sitting by the side of the boiling juice, and so I had a little *cuddy* (I can think of no better term) cut out by the side of the battery, up high, and into this I crawl up, and there stay sometimes half, and sometimes the whole day long. Having nothing to guide me in this matter, no past experience or medical advice, I follow my own inclinations about it, and very probably do not manage it as I ought. The efforts to keep myself in as comfortable a position as possible, and yet to hang over the kettle as far as I can, without falling in, give me plenty of exercise, notwithstanding the small space I have to take it in. I can bear almost any degree of heat. The thermometer stands by my head at 110° and upwards. Yet it is none too warm. It takes that degree or more to open the pores of my skin, which is hard and dry as parchment. All my physicians have tried in vain to produce moisture upon it; but the vapor in its greatest intensity makes a sweat like rain. I get all it is possible to do in a sugar-house on my throat and chest, and think if one could take a regular bath of it, like any common vapor bath, it would cure almost any complaint. It makes me *sleepy*—is the best opiate I ever took—and

the night after my first day's toil in my sugar-bath house, I slept more soundly for several hours, than I have for years; but was awakened by a pain as great as if every limb had been racked, and the next day could scarcely bend my limbs; and sharp pains continued all over me for some time. But they passed off by degrees; and though I have ridden my sugar-hobby horse as faithfully as before, I have not been so afflicted since. But for the continued pain in my breast, around my right collar bone, the pit of my stomach, and between my shoulders, I should think I was getting well fast. This pain is not so severe while I am under the influence of the vapor. I feel it, but it is not (to speak paradoxically) painful—it is, as it were, *over-mastered, smothered*. At other times it is very sharp and lancinating—comes and goes suddenly. When it is on me, I feel as though it is foolish to think I shall ever be free from it, and while feeling so it is gone. When I am free from it, I almost forget that I ever had a pain in the world; and while enjoying this oblivion, back it comes again. Thus it has been for eighteen months. Yet all this time, except when prostrated by hæmorrhage from the lungs, *I have never lost my strength*. The vapor weakens me for a short time; but after a little rest, strength returns. I do not perceive that I either gain or lose flesh."

This letter speaks for itself. The Italics, points, language and everything are all her own. Her description of intercostal neuralgia—a frequent attendant on tubercular phthisis—is drawn from nature and to the life, although she does not seem to know that it is not a part of the other pain she speaks of, as being felt nearly all the time, which is evidently pulmonary in its origin, but a superadded pain in the intercostal nerves. As she did not perceive whether she gained or lost flesh, I requested her to be accurately weighed from time to time. The discovery was subsequently made that she gained at the rate of a pound of flesh every five days. She said her healthy weight five or six years ago, when in the best health, was from 120 to 124 pounds.

"Then," says she, "my collar bones were covered with flesh, and were not at all visible. My collar bones are still like hills in valleys, but not so protuberated as when you saw me. Blessed be the sugar-vapor."

She was below her minimum healthy weight when she went into the sugar house, as nearly as could be ascertained by comparing the rates of gain, some thirty pounds; and the week before she came out, she had got back about half her lost flesh—having gained some fifteen pounds. As she had adopted the extraordinary expedient of getting into the *vapor-chimney* to inhale the vapor from the boiling cane-juice in the kettles below, I asked for a particular description of her method of inhaling it. I would premise, however, that the vapor-chimney is a wide cone with its base downwards, reaching within a few feet of the tops of the kettles, to conduct off the vapor arising from the boiling cane-juice, to prevent its filling the room and obstructing the vision. Formerly there was no such contrivance—it was introduced by the American planters. On those plantations having no chimney, the whole house is full of vapor. In such my first observations were made. But where there is a vapor chimney,

it is necessary to stoop over the kettles to inhale it, or to put a board or two in the flue to throw it out from the chimney. The boilers are from four to five in number, each about six feet in diameter, and distinguished by different names, the last one being called the battery. Being disappointed in finding no vapor to inhale without leaning over the kettles, the patient had a closet or cuddy made in the chimney above the boilers—the floor of the closet being a little above the boiling juice.

The patient's description of her method of inhalation.—"I cannot say I ascend to my room by marble steps, but I manage to get up to it very well. The floor of my room has a carpet, (a negro blanket), hung around with tapestry (coffee bags), sitting and kneeling cushions as many as it will hold. The dresses I wear were invented and made as occasion requires. I wear on my head a veil which falls in many folds around me—is now inflated and spread out in its fullest extent—now contracted and drawn in." "I will tell you how I wear it, and how it is made. Its form is circular and closed at the sides—is quite full, being four feet in width. I put it over my head entirely, so as to protect me from the dripping of the roof. I leave a little opening just large enough to take a peep through when I wish to. I can let it drop to the very kettle's brim, and receive from under it a column of vapor just as hot and as strong as I can possibly bear. The degree of heat depends greatly upon the way the wind blows and fills my sails. I learn something new every hour I sit or stand in my little prison house. The top of the board which protects me from the hot juice is about three feet high. I get on my feet and bend over the kettle. Behind me is the box containing the sugar-juice thrown out of the battery." [She means the *strike-box* where the hot syrup from the last kettle is thrown to crystallize into sugar.] "I get the benefit of this also. The two meetings of the vapor are most intensely penetrating. I wonder how I bear it. I find the more perspiration passes off, the more heat I can bear. I have every variety in my sweats. The moistening dew, the gentle shower, the heavy rain, and the stormy, perhaps the destroying deluge. *Certain I am there will be no medium to my case. It will be either kill or cure with me, and I mean it shall be.*" [The spirit of Andrew Jackson must surely still hover about the scene of his glory, and moves the *Maid of the Mist*, as the patient is called; for she utters the same sentiment that he uttered on the eve of the great battle, and almost in the same words. A great battle is going on between the all-conquering, full-grown, hæmorrhagic, tubercular phthisis gnawing at the lungs of the Philadelphia lady, and the saccharine cloud, charged with the elements of nutrition to warm-blooded animals, and destruction to the cold-blooded and the horrible beings of the microscopic world, which in all its concentrated power she has invoked to her rescue. All manner of poisonous, unhealthy and irrespirable vapors and noxious substances, in every form, have been directed against phthisis tuberculosa, but the disease being of a deadly, poisonous, irrespirable nature itself, it has flourished under them so greatly, that the more learning the less faith physicians have in any measure whatever to arrest its

fatal progress.] "Sometimes I get so weak I can hardly get to my bed—not faint, exactly, but so like sinking down. There for an hour or more sometimes do I lie, seeing before me all the boiling kettles, and feeling as though I should burn up alive. I do not lose my consciousness. Still I feel as if enveloped in mist that burns instead of melting, and everything is dark and cloudy. Yet after this has passed away, I am well and strong as before. By means of my veil I am able to let the vapor reach the whole surface of my chest, under my arms, and my arms themselves their whole length. My pains have greatly lessened, but still continue—less between my shoulders now, but higher up than they used to be. I think the left lobe of my lungs has healed. I have but little pain in that side now. My most pain is around and just below the right collar bone and close to my shoulder." * * "You ask if time hangs heavy? I answer, no. When the sparkling *sirop* is full of bubbles, and the scum in each kettle is all passed off, then the loud laugh begins and the ludicrous song, and the cry is given to *fire up*—the skimmers are laid by, and all hands heave the bucket together. Think you that the Maid of the Mist, peeping out from the clouds around her to gaze on the sublimity of the terrestrial scenes below, and then retreating as the thick rising waves enfold her in their sweet embrace, feels time hang heavy? I have to work hard and fast to keep the perspiration well wiped off." * * * "The vapor smoke does not smut, but makes my face and skin shine like a mirror."

The mode of drinking the hot cane-juice.—"I have my own way of drinking the cane-juice, and I practise with this as with the vapor. I take it from the flambeau"—[the kettle next to the battery, there being no *prop* in that sugar-house.] "I sour it with lemon juice—use two or three a day. I drink from a teacupful to a pint in ten or twelve hours, and take it before retiring to rest."

Her diet.—"I use what I like best—live principally on sweet potatoes, for which I have a most unromantic craving—eggs, milk, rice, oysters, wild duck and fish; but my great stand-by is the potato, which I never take a meal without, besides keeping a sort of general munch at them all day long. I am living utterly regardless of system; nobody meddles with me. All do pretty much as I do—follow their own wills. So (to use a favorite expression of the darkies), I have a *first-rate* time in getting along."

What Uncle Harry, the black sugar-maker, says.—"The black sugar-maker says he sees the *blood-grains* coming in my face every day, and that it does him good. Please admire this expression or term, *blood-grains*. It is expressive, technical, full of meaning. You know they test the syrup to see when it comes to the sugar point, by dipping in a ladle. When grains appear on this—granulose drops I suppose I should say—the moment has come for taking out the juice. Now what could be better than his idea of *blood-grains*? The rosy tinge of the novelist and poet is nothing to it—that phrase is surfeiting—'tis original. Once I was foolish enough to correct the phraseology of the blacks—to change

their *fotch* and *brung* into bring and brought; I have a purer taste now, and like to see everything in keeping. I have every help in the way of kindness from all around. The white sugar-maker is very sweet in his way; but the black is chivalrously devoted—seems to connect my recovery with the reputation of the plantation—says he shall be *ashamed* if I do not get well. I gain flesh, and my arms are more solid.” * * “That stricture in my breast is all gone. I can throw my arms back now where they belong and used to stay before my illness. They have life now; they hung like aching weights before.”

What Aunt Susan, the asthmatic woman, says.—“I took the phthisical woman up to breathe the vapor. She dislikes it very much—says it is harder work than cutting corn in the field.” [In asthma the lung is already too thin and expanded; in consumption the lung substance is more or less condensed. Hence the vapor, so useful in expanding the compressed tissues and enabling the air to permeate and expand the contracted parenchyma in consumption, causes a sensation of great fatigue in asthma.]

A little girl cured of a croupy cough.—“I cured a little black girl I have in my room to keep the ghosts off of nights, of a croupy cough, by making her inhale the vapor. Cured her in half a day, cough and all.”

The sugar-house vapor causes the expulsion of the tubercles from the lungs, transformed into crystals of cholesterine, perhaps.—“La voila! The awful, awful hot vapor, I described to you, has dislodged and brought up from unknown depths little rice-like and other very hard, irregular-shaped particles, that from their antique appearance look as though they might have taken root in my lungs as far back as the cradle. They are probably what remained when I had not strength to raise all that ought to come up. I can only state facts, and tell what I think is the cause of them.”

Her opinion of Physicians.—“I had the best. They gave me due warning of the state of my lungs before they set up their flaming-red banner.” [She alludes to hæmoptysis.] “I have spent a good portion of my life with those of your profession, and have friends and relations who are doctors, and my whole existence, in short, has been so connected with them, that some how I have got to think that I am half a doctor myself. Then they understand a body so well, too, and have such liberal views of men and things; they are the easiest people in the world to get along with, though they are apt to disagree among themselves.” * * “They told me that besides the revelations of auscultation, there was evidence enough that my lungs were deeply implicated.” * * “Do you know Dr. Hunt, editor of the Buffalo Medical Journal? Though not my doctor, he stethoscoped my lungs.” [Dr. Hunt is remembered as one of the most polite and good-natured of those, who hastily confounded my advocacy of a great truth—the Willardian theorem, that *the chief motive power of the blood is located in the lungs and derived from respiration*—with the Willardian theory or hypothesis that caloric, generated in the lungs, circulates the blood—an hypothesis built upon another hypothesis,

long since exploded, that respiration is a veritable combustion. The progress of physiology has put out the fire in the lungs from which Mrs. Willard derived her caloric to circulate the blood, and while utterly demolishing her hypothesis every foot of its progress—the doctrine of cell life and an active circulation in embryos before the heart is formed—is tending to demonstrate the great truth first announced by her, the American *Filia nata Jovis*, that it is not the heart, but respiration or rather oxygenation, from which the chief motive power that circulates the blood is derived. Much merriment, at my expense, has been indulged in by writers in the medical journals, and even in the *National Intelligencer*, attributing to me the folly of being an advocate of Mrs. Willard's untenable hypothesis, because my experiments on alligators had demonstrated the truth of a most important physiological principle, which she had been the first to announce. Prof. Theophilus Thompson, of London, has, in a recent work, not scrupled to appropriate Mrs. Willard's *practice*, founded on her *theorem*, to himself, without giving her credit for one or the other. See his work, "Clinical Lectures on Pulmonary Consumption," page 216, where he says "*I cannot but think that some of the evils incident to intense study might be obviated by occasionally pausing to practise breathing.*" He surely ought to know, what nearly every intelligent physician of America knows, and what the weaker brethren have been laughing at, that Mrs. Willard has for many years been putting in practice on her numerous pupils, and recommending in her writings, the very thing which he suggests. If he knew it, he ought to have her credit for for it; and if in doing justice to a woman, he brought on himself a storm of ridicule, as has been my lot, he ought to have stood and took it.]

How goes the battle between the sugar-house vapor and tubercular phthisis?—Let the Maid of the Mist proclaim the victory. "To-day I take my last vapor inhalation, and shall feel when leaving the cuddy in the chimney as though I were leaving my last, best and only friend. I passed yesterday in making flags and banners for the row [ball] at the brake up. I am going to try my hand at fancy cooking for the darkies—to help get them up a supper. I AM CURED! Yes, even I, the given out to die. All around tell me of the great improvement in my looks. I do not hold much intercourse with a mirror; but I have an inward glass in my feelings, which gives quite as true a report. I could tell you of *test-acts*, infinite in number, proving that I am cured. First, of an accidental one. I got into a boat to see if I could row myself. I was making fine head way, when I lost my balance and fell splash into the water—had a complete immersion. A black woman took me out, and though I had to drag my wet garments quite a distance, yet *I did not take a bit of cold*. Lately, instead of going to bed after inhaling the vapor, as I did a month ago, I go immediately out and exercise actively in the open air, and feel better by it."

The ball.—"The neighbors were invited to the ball. It rained, and they had to stay all night. I sat up and paddled about all night from the house to the ball-room (an open barn), and to the kitchen, in the wet and rain. I felt well."

A week after the ball.—"Half the blacks on the place have been made sick by the unlucky rain on the ball and supper night—have sore throats and cough. I have been indisposed myself in the same way, but am better than the sick black ones."

Two weeks after the ball.—"I am remarkably well—no pain—no cough—no expectoration—no sore throat, and have the use of my voice—which becomes a little hoarse, however, after much loud speaking."

Last account, Sept. 11th, 1854.—Patient reports that she continues well, and resigns her place in the sugar-house to a consumptive friend—not intending to return. She says, after much loss of rest in nursing the sick and exposure, she expectorated a little yellow matter, and thinks it came from a small spot in her lungs—retains her voice, which only becomes a little hoarse after much loud speaking—has spit no blood, not a drop, since last winter—has been free from fever, pain or cough, and has her strength. She concludes her letter by saying that, "No inward medicine, no outward appliances, have the effect of the vapor in removing pain and oppression from the chest."

Canal st., New Orleans, Sept. 28, 1854.

From the New Jersey Medical Reporter.

Mortality among Children. By W. A. ALCOTT, M.D.

The Boston Journal for August 10 has an article, copied from the Baltimore Patriot, on the mortality of children, which is deserving of the attention of those whose office should be not only curative but preventive. I copy from the article as follows:—

"In the cities of New York, Philadelphia and Baltimore, last week, out of a total of 1,724 deaths, 1,025—within a fraction of two thirds of the whole number—were children under five years of age."

Now as there is no date to the article of which the foregoing is a part, it is not in my power to say precisely *what week* the writer refers to; but it is a fair inference that it was recent. Nor am I able to say by what arithmetic or logic, 1,025 is made out to be "within a fraction of two-thirds" of 1,724. It would be more nearly three-fifths of the whole. Still, the fact is a terrible one. Many have thought the statement so often made by myself and others, that two-fifths of our population, *taking the year together*, die under five years an exaggerated one; but here is a mortality of three-fifths for a particular period.

The writer in the Baltimore Patriot, in his comment on the dreadful fact, justly observes;—"There is certainly some cause for this, and it is due to the science as well as the philanthropy of the age, that this cause should be distinctly ascertained and pointed out." Again he says:—"A close examination of the subject, we doubt not, would show that it is

chiefly among those who are surrounded with all the comforts, and in many instances, with the luxuries which riches command, that infantile diseases find their most numerous and unresisting victims."

With one qualification, Messrs. Editors, I can subscribe most fully, to the truth which is suggested in the latter quotation. Instead of saying "riches" in a country where almost every pauper is rich enough to have his appetite tickled and gratified, I would say "money and a short-sighted selfishness."

In regard to the causes of this fearful and fearfully increasing infantile mortality—for there are doubtless more causes than one—I have something to say, suggested by the study of the subject for thirty years or more. And though I lay no claim to infallibility, I do greatly desire to be heard.

My first suspicion rests on the too free use of alkalies among us. I say "the too free use," because, although I should not be likely to encourage their dietetic use, in any quantity, or in any circumstances of *health*, yet there is certainly a wide difference between excess and moderation. It is one thing to use just so much saleratus as shall be neutralized by the acetic acid it meets with, so as to leave no residuum but a little acetate of potash, and quite another to use the alkali so freely that a portion of it remains in the stomach and intestines unneutralized. Yet the latter is an every day occurrence. Our children, generally, have their first passages in a state of sub-inflammation, from this and other kindred causes; and though the use of mild acids, especially those of fruits, may do something to soften or mitigate the condition, is it any wonder that bowel complaints, in these circumstances, become very severe and unmanageable? Is it any wonder that two-fifths, and in summer three-fifths of all who are born, die under five years of age?

I have no doubt that quackery and humbuggery, as well as many more things, tend to a fatal result in these cases; but I can say no more in a single number. You may possibly hear from me again.

AUBURN DALE, *August 15, 1854.*

Mortality among Children, No. 2.—When I call to mind that the character of your work varies somewhat from that of its predecessor—whose motto was "The best part of the medical art is that of avoiding pain," I begin to doubt whether you have room for short articles from time to time on prevention. And yet, medical men in general are not so lost to philanthropy, and even to common humanity, as not to look a little at prevention now and then. They know something of the pain I have often experienced on reflecting that while I have been the means, apparently, of extending the lives of some of my consumptive patients from one to thirty years, it has had one terrible effect which philanthropy herself scowls at—it has served to propagate and perpetuate a feeble race. Still, cure we *must have*, and *will have*; and postponement, and palliation. It wont do to let the feeble die off if we can help it.

The subject I broached in a late number of the Journal on infantile mortality is one of serious and alarming import. The paper from which I quoted was probably correct, for during the week ending about the middle of August, the New York Independent states the whole number of deaths in the three cities I have mentioned, at 1,790; while that of those under 5 years of age was 936, considerably more than half, still. Such a mortality is indeed frightful. What are we to think of the habits of people when half the children in families die under 5 years of age? What would be thought of the good sense and right treatment of domestic animals where half the lambs, pigs and chickens should die thus prematurely?

I spoke of the use of salætatus as in the front of a long list of transgressions. I ought to have particularized. Dr. Hammond, of Killingly, Ct., first called my attention to this subject, ten or twelve years ago. He confessed to the use of ten pounds in his small family in a year, and said he was very far from being alone. Soon after that, I went down East, and learned something of the state of things in New Brunswick and Maine. I found that in Bangor ten or twelve pounds a year were very common. So I found it afterwards in some portions of Massachusetts and Connecticut. Col. Ivers Phillips, of Fitchburg, five or six years ago, told me that in a family of ten persons they used twenty-five pounds a year; and Mrs. P., who was present, endorsed the assertion. The smallest quantity I have known used in any ordinary family, except my own, is about five pounds. In Ohio, families who were at first disposed to sneer at my statements, confessed to the use of six or eight pounds yearly.

My deliberate conviction is, that the families of twenty millions of people in our United States population—amounting to about four millions—use the average quantity of five pounds of this alkali yearly—or one pound to each individual. This is an aggregate of twenty millions of pounds. How much of this goes into the alimentary canal and courses its devious way without meeting with any free acid or other substance calling into play new affinities, cannot easily be told. In these days of excess in its use, I fear one-half. But to be safe, I will place it at one-fourth. Is it so, then, that the lining membranes of our people—our children among them—must be irritated yearly by 5,000,000 pounds of uncombined—unneutralized salætatus? The very thought is enough to make one shudder!

From ten to twenty grains of this substance is sometimes put down in our medical dictionaries as a dose. Place it at thirty. Do we swallow 960,000,000 doses of medicine a year, in this careless, uncalled-for manner? What effect can medicine be likely to have, when given in an emergency, to children who have been irritated day after day, and year after year, in this way? I have said irritated—not poisoned. Yet Orfila, I find, calls salætatus an irritating poison, and gives us a long list of its terrible symptoms. I need not detail them in a Journal designed for the profession; but they ought to be hung up in letters so large that they could be read at any distance all over the country. They would make some of our house-keepers stare—and it ought to be so.

Let us make one more estimate. I have not facts to bear me out in what I am going to do, because I have not the patience to gather them up—scattered as they are up and down the earth's surface. But I suppose four maximum medical doses of this article, taken at once, would be called excess; and this excess would be evinced by some or all of Orfila's "symptoms." In short, the individual who should take such a dose would be poisoned. I do not say he would certainly die, for I am not warranted in this. But I do say that, in all probability, he would not greatly desire to take another such dose immediately. But 5,000,000 pounds of this alkali—the quantity we supposed to be swallowed yearly unneutralized—would at this rate be 240,000,000 doses of the poison. It would poison all our 20,000,000 of white people in the Union, twelve times each, or once a month, for the whole year. But enough for the present.

AUBURN DALE, *August 25, 1854.*

Mortality among Children, No. 3.—One fruitful source of infantile mortality is medicine. Let not my medical friends accuse me of heterodoxy, in making this statement. I have reasons for my belief.

When I speak of medicine as a cause of infantile mortality, I have no reference—not the remotest—to that small amount of it which is given at the prescription of the family physician. There may have been error here; there certainly *has* been, in all time and countries, *unless it is our own*. But I waive all this. Nor do I refer in particular to the enormous quantity of drugs and medicines taken without the prescription of any person duly qualified for the purpose, beyond the pale of the family—a hundred times greater than the quantity given by all our regular physicians of every school.

But I would aim, chiefly in these paragraphs, at what I have been accustomed to call maternal dosing and drugging. Bad as the world is, in other departments of drugging, this is more prolific of infantile disease and premature death than all else, except bad cookery; of which, by the way, I have said something in a former number.

Mothers assume to understand the constitution of their own children; and almost deem it an insult to be told of their mistake. Yet they are mistaken. Reasoning *a priori*, it is impossible, or at least next to impossible, for those who are situated as mothers generally are, to understand enough of the laws of hereditary descent, temperament, &c., to be able to understand what is almost impossible to the wisest physiologists and physicians. And then, as regards the plain matter of fact, their mistake is still more obvious. They almost every day, for example, treat their scrofulous children—amounting to one-third or one-fourth of the whole—in a manner diametrically opposite to what they would have done had they understood the nature of the case and how the first symptoms of latent scrofula manifest themselves.

And yet it is almost as much as one's reputation is worth, whether in the profession or out of it, to run the risk of giving to our mothers this

little piece of information. And the hazard is great in exact proportion to their ignorance. An ignorant mother is, next to the Pope of Rome, the most infallible of all human beings! I mean, of course, in her own estimation. You may reason, sometimes, with an intelligent mother—seldom with an ignorant one.

But whether ignorant or somewhat enlightened, the vast majority of our mothers doctor, more or less, their own children. At least, if they refuse to call it *doctoring*, they give them a vast amount of small elixirs, cordials, &c. The closets of not a few house-keepers are a complete apothecary's shop. They may, it is true, have smaller parcels than the regular apothecary; but they have almost as great an assortment. And they not only keep it; they administer it. They may not intend it; they *do not mean* to give *much*; sometimes they really *think* they *do not* give much. But it comes to pass, in the course of the year, that much is given by somebody; and I greatly fear that the mother must be held responsible for it.

True it is, that no mother confesses to this crime of dosing and drugging. As it used to be with tight lacing of the chest, that no one was guilty herself, but almost everybody else was, so in this matter of drugging and dosing children. Yet how often have I seen these very mothers with their bottles or phials on the steamboats and railroads of our country—hardly willing to wait for the arrival of the cars at a “station,” before they administered the needful elixir, but actually administering it on the road!

But now for the consequences of this maternal dosing; for this it is with which medical men have chiefly to do. Next to bad food and wretched cookery, as I have before intimated, this error is productive of more sickness and premature death than any other. No physician knows what to do with a sick child, who has been thus tampered with. He may indeed *guess a little better* than others; but even *he* will often *guess wrong*. Their first passages are irritated, and perhaps inflamed; and if it were possible to make the right appliances either internally or externally, it would still puzzle the wisest head to know how to apportion the quantity so as to be more likely to do good than harm. Diseases, in these circumstances, as you know, are more apt to be severe and complicated, and the termination more likely to be fatal, especially if much medicine is used.

The worst remains to be told. As it is not always easy to trace the cause of severe, protracted or fatal infantile disease to maternal error, we not only contrive to kill, from generation to generation, by thousands and tens of thousands; but we partly kill by millions. If all the mischief that is done could be concentrated, as it were, in a few, and were to kill them outright, so that everybody might see that they fairly died of violence, there might be hope. But no; we seem to be left to grope on in ignorance, and not only to kill, continually, but to *partly* kill many more. We bring on, gradually, some disease or other; or we render an inherited disease, which might have been mild, very severe, or early fatal; or we aggravate, by over dosing, the symptoms of acquired diseases from other

causes. We clip from the existence of one child or person, a year; from another, two or three years; from all, or almost all, something. The aggregate of these clippings, so to call them, every year, though it cannot be exactly ascertained, is, no doubt, fearfully great, and fearfully increasing.

I have sometimes thought maternal dosing was a little more mischievous in the families that confide in homœopathic and botanic treatment, than in those who adhere to the old system. I will tell you why. They seem to think vegetable medicine, and even small doses of mineral medicine, so harmless that they may dabble with them when and where they please—almost without reserve or limitation. Perhaps this is not justly chargeable on the systems themselves, but only an incidental evil. But this does not alter matters of plain fact; and if the public are killing their children with too many small shot, as well as with musket and canon balls, it should be known, that the evil may be guarded against, or, if possible, removed.—*Boston Med. and Surg. Journal*.

AUBURN DALE, Sept. 9, 1854.

From the New York Journal of Medicine.

Operations on the Rectum and Anus for Malformations, Laceration of the Sphincter, Hypertrophy of the Sphincter from Spasmodic Action, Constriction, and Ulceration of the Rectum and Colon. By W. PARKER, M.D., Professor of Surgery in the College of Physicians and Surgeons, New York.

[We invite attention to the following article from the pen of Professor Parker of New York. The subject is interesting in itself, and has received the particular attention of this eminent Surgeon, for some years past. It is to be regretted that Dr. P.'s extensive practice prevents him from often communicating the results of his experience and reflections to the Medical Public at large; and we may be certain that whatever he does write, is worthy of a careful perusal and of preservation for future reference.—*Eds. Peninsular Jour.*]

Congenital malformations of the rectum and anus claim the especial attention of the practitioner; 1st, because of their frequency; 2nd, the necessity of prompt interference; and 3rd, the ill success of the various operations undertaken for their relief. Of the frequency with which these cases occur we have no accurate means of judging except from personal observation. It is sufficient, however, to know that they are liable to occur in the practice of any physician, and that they require early recognition and prompt attention. Not that the life of the patient is placed

in immediate jeopardy if relief is not given at once, for it is a fact that the little sufferer will often live for weeks and indeed months without having the bowels evacuated by the natural channel. But such cases are exceptional and do not serve as guides in practice. The success of the various operations which have been undertaken for the cure of these malformations is truly discouraging. Amussat denies that they ever succeed, and it is well known that Mr. Brodie has refused to operate, preferring to leave the case to nature. Operative surgery, however, has been too successful in relieving other grave deformities of the body, to make us despair, or even doubt of its ultimate success in remedying these serious malformations.

These malformations consist of 1, *Closure of the anus* by a membrane resembling the external integument; the bowel terminating at the anus, and the septum being so thin that the fluid collected within protrudes whenever the child cries. These cases ordinarily require only a crucial incision and the removal of the corner of the flaps thus formed, and some care to keep the opening patulous by means of tents.

2. The anus may be *completely absent*, its place being occupied by a dense fibro-cellular structure, and the bowel terminating in a cul-de-sac above. This deformity is much more serious than the former. The operation usually performed for its relief consists in puncture with a trocar or bistoury and the subsequent introduction of tents. The most novel operation in these cases was recommended by Amussat, and by him first performed. It consisted in dissecting up this cul-du-sac, drawing it down and attaching its border to the external integument.

3. The anus may be *contracted* so as to allow of the escape of the meconium only in drops. This condition is relieved by slightly incising the contracted orifice, and afterwards dilating it with sponge tents. If it depends upon a partial septum stretched across the passage, this must be divided.

4. The anus may be perfectly well formed, and appear natural, but at a variable distance above its orifice, generally about one and a half inches, the bowel is by a firm septum stretched across its passage. These cases are liable to be overlooked owing to the normal appearance of the external parts. They are, however, easily diagnosticated, when the attention is called to them. By passing a probe up the rectum, it meets the obstruction, and where the septum is thin, an impulse is given to it whenever the child cries. This malformation is relieved, like the former, by puncture or incision of the occluding membrane.

These are the more ordinary forms of malformation of the anus and rectum, and those to which I wish especially to direct attention. In common with others, I have performed the various operations above mentioned with the most indifferent success. In some cases, death followed from an unknown and inappreciable cause. Again, it was the result of purulent absorption, especially in those cases where it was necessary to penetrate deeply in order to reach the bowel; and finally, the mass of cases terminated fatally by closure of the artificial passage, the constant tendency of which to contract being the greatest obstacle to overcome.

I have recently, however, resorted to a simple expedient which has seemed to avail something in the ultimate success of the operation, and to which I wish to direct attention. It consists in introducing the finger forcibly into the artificial tract and thus dilating it freely, both at the time of the operation and subsequently at short intervals. In three cases treated in this manner within the last year or two, two recovered, and the third died from neglect. The following brief notes of cases treated by some of the different methods alluded to will serve to show the fatality of these various operations:

CASE. 1.—I was called, on the 24th of February, 1840, to see an infant which was born on the 21st, at 8 A.M. The child had had no evacuation of its bowels, and an imperforate rectum was found to be the cause. The anus and sphincter were entirely natural, but, on introducing a probe, a septum was encountered about one and a fourth inches from the verge of the anus. An operation being decided upon, the trocar and canula were carried through the obstructing tissue, and on the withdrawal of the former, the meconium was freely discharged. A flexible catheter was introduced and an injection thrown freely into the bowel. The case progressed favorably until the seventh day when the child died from neglect.

CASE 2.—I saw a child on the 14th of March, 1841, which was born on the 12th, with an imperforate rectum, the closure being three-fourths of an inch from the anus. The bowels were very tumid. I introduced the trocar and canula and succeeded easily in giving free exit to the contents of the bowels. The child died, however, eighteen hours after the operation.

CASE 3.—This was a female child also having imperforate rectum and two days old when first seen, on the 16th of October 1841; it was suffering very much from the retention of the meconium. The septum was found to be one inch from the anus. I operated, as in the preceding cases, with the trocar, and had no difficulty in freely discharging the bowels. The same measures were also employed to keep the passage open, and with success; the child perfectly recovered.

CASE 4.—I was called on the 7th of December 1841, to see a fine male child, born on the 3d of the same month, who had passed nothing from its bowels. The rectum was found imperforate at the distance of half an inch from the anus. The abdomen was very much distended, and the child had suffered from convulsions during the previous twenty-four hours. I punctured with the trocar, and succeeded in unloading the bowels freely. The child died on the following day.

CASE 5.—I saw this child thirty-nine hours after birth. It had an imperforate rectum, the septum being one inch above the anus. The operation was performed as in the preceding cases, the trocar penetrating to the depth of two inches from the verge of the anus, before it entered the bowel. The meconium was freely evacuated, and the urgent symptoms relieved, but the child died in nine hours after the operation.

CASE 6.—I was called to see an infant in Williamsburg, twenty-four hours old, which had an imperforate anus; there was no trace of an anus discoverable. When the child cried, I could detect with the finger a

perceptible impulse communicated by the bowel to the intervening substance. I made an incision, and succeeded in penetrating the cul-du-sac at the depth of one and a half inches. On the introduction of the catheter the meconium flowed freely. The child died.

CASE 7.—This child had an imperforate anus, for which an operation was performed on the fourth day, with entire relief. Four days later, it was found necessary to repeat the operation, as the artificial passage had been allowed to close. But it proved impossible to find the old passage, and accordingly a new one was made with the trocar. Not succeeding, however, in giving exit to any feculent matter, injections of warm water were used, and afterwards sweet oil, which escaped without any trace of faeces. A catheter was introduced, but with no better result. A small dose of calomel was ordered, and further attempts to reach the bowel delayed for several hours. Upon a second trial, the cul-de-sac, was reached without difficulty, and a free discharge from the bowels followed. The severe symptoms were relieved, the vomiting which had been troublesome subsided, and the case assumed a favorable appearance. A portion of flexible catheter was retained in the passage, and injections with warm water employed from time to time. The case progressed favorably after this operation, and ultimately perfectly recovered.

CASE 8.—I was called to see this child, when two days old; it had passed nothing from its bowels, the abdomen was greatly distended, there had been efforts made to relieve it, but without success. The obstruction was about three-fourths of an inch from the anus. The operation was performed with the trocar, and the meconium freely discharged. Instead of withdrawing the canula and treating the case by the introduction of tents, as previously, I determined to dilate the passage freely by the introduction of the finger. To accomplish this, a knitting needle was passed through the canula as a guide to the opening in the bowel, and the canula being withdrawn, the little finger was carried forcibly along the needle to the bowel, thus freely dilating the passage. On removing the needle, a pledget of lint was introduced, and the physician in attendance advised to pass his finger daily the whole length of the passage. The case progressed very favorably for several weeks, but this precaution being finally omitted, the child died.

CASE 9.—I was called to see a female child twenty-four hours old, December 12th, 1853, which had an imperforate anus. It was small, but well formed and apparently healthy. The operation consisted in passing the trocar up to the bowel and evacuating its contents, which was done without difficulty; it was completed, as in the former case, by introducing the little finger, and forcibly dilating the passage. This practice was continued from day to day, and thus the tendency to the contraction of the passage and its ultimate closure, was effectually prevented. The child recovered.

CASE 10.—This was a fine male child, which was brought to me on the second day after birth, with an imperforate rectum. I operated as in the two last mentioned cases by the introduction of the finger after the withdrawal of the instrument, and freely dilated the passage. As in

the preceding cases, the patients were left in charge of others, to carry out the treatment, and as the failure seemed due to neglect, I determined in this case to attend to it personally. The parents were, therefore, directed to return with the child every two or three days. They did as directed with great punctuality, and the passage was frequently and thoroughly dilated, but without causing the child any inconvenience.—This dilation was continued several weeks, when, as the passage showed no tendency to contract abnormally, this practice was discontinued. The child continued to thrive finely, but died when about two years old, of croup.

CASE 10.—Laceration of the Perineum and Sphincter Ani during Parturition—Cured by division of the Sphincter and subsequent closure of the Perineum by Sutures.

I was called on the 24th of October, 1849, to see Mrs. M——, who had recently been delivered of her first child. Her labor was terminated with instruments, and an extensive laceration of the perineum, involving the sphincter ani, followed their employment. I was called in consultation a day or two after her confinement, to relieve, if possible, by an operation, her unfortunate condition.

On examining the parts, I found the laceration very extensive, extending fairly through the sphincter ani, the edges being widely separated, and the torn ends of the muscle drawn upon either side toward the coccyx. The appearance of the wound resembled that which is produced on dividing the orbicularis oris, the edges of the wound being drawn widely and permanently asunder by the contraction of the muscle.

The appearance of the wound suggested the method of cure. It would be difficult to retain the approximated edges of the lacerated parts of the anus in apposition while the sphincter remained in its present condition, strongly retracting its lacerated edges towards the coccyx. I accordingly proposed to divide the sphincter subcutaneously, but thoroughly, on each side of the coccyx, and then, after trimming the edges of the perineal laceration, approximate the lips of the wound, and retain them by deep clamp or quill sutures. The operation was acceded to by the gentlemen in attendance, and I proceeded at once to operate.

The sphincter was thoroughly divided at the points above indicated, and the edges of the wound, paired, were easily approximated and retained by the quill suture. The bowels were confined by opiates for several days and finally moved with injections of sweet oil. Union readily took place, and the result was most satisfactory.

(Concluded in our next)

EDITORIAL.

Clinical Instruction.

In the November number of the Journal we noticed a Report on Medical Education contained in the transactions of the Medical Association of Southern and Central New York, and alluded to the exceptions taken to the author's views on clinical instruction, by the North-western Medical Journal, and gave some imperfect sketches of the manner in which teaching is conducted in some of our medical schools and hospitals; promising, on a future occasion, to present more fully, our views upon the subject of clinical instruction, and the manner in which it should be pursued.

By clinical instruction, is meant, instruction at the bed side of the sick; or at least, practical instruction by a teacher to a pupil, in the presence of the patient, as a subject of illustration.

It properly includes an examination of the case in hand, in all its aspects—the previous history of the disease and of the patient—the class of persons to which he belongs—his individual peculiarities and tendencies, the circumstances with which the case is surrounded, and all the influences which may produce any modifying effect upon it. The full diagnosis must be made in the presence of the pupil, pointing out, and illustrating the means by which it is arrived at. The special pathology of the case, must be shown; the indications of treatment must be pointed out, and the means by which those indications are to be fulfilled;—and an illustration of the mode of applying those means, and an exhibition of their effects, must be distinctly made. Indeed, there must be a careful watching and a thorough studying of the disease and its course, of the treatment and its effects, from beginning to end.

In order to accomplish all these purposes, we can readily see what will be necessary.

A visit to a patient with an acute disease, once or twice a week, will by no means suffice, however careful the examination, and full the opportunity of observing, at the time, may be. Neither will a daily visit accomplish the necessary purposes, unless the student has a full opportunity for a close personal inspection of the patient, and his various conditions, and has time to enquire into the effects of the medicine—and in short, every circumstance and condition of the case. The countenance must be observed—the tongue seen—the pulse felt—the condition of the skin noticed—the chest percussed—the breathing listened to—the pupils inspected—the excretions examined, &c.

And further than this, the management of the sick room should be studied—the conduct of the nurse, the deportment of attendants—the whole system of management of the mind, so important a part of correct treatment—the mode of using bathing, frictions, &c., and of preparing and administering food and medicines, must receive attention.

It is also important, in true clinical instruction, that the student should see patients of a class, and under circumstances similar to those with which he will meet in practice. All must see that all these things are essential to correct clinical instruction of the highest kind.

Now, we ask, are these circumstances possible—can these things be done in a hospital, in *any* hospital, on this or the other side of the Atlantic—in Paris, in London, in New York, in Philadelphia, in Cincinnati or in Chicago? In the very nature of the case, the thing is impossible. In hospitals of large cities, we meet with a class of cases very different in their aspects and tendencies, from those which are met with in respectable private circles, and especially from those met with in the country; and students receiving their only impressions of diseases from such sources, will be greatly at fault in their management, when they meet with cases of a class so very different, and under circumstances so completely changed.

But can true clinical instruction be given out of a Hospital? Certainly it can, in every town, in every hamlet, in every “country ride” where there is an intelligent and well educated medical practitioner.

Large numbers of cases are not necessary to teach the elements of medical practice. They are only necessary to the medical philosopher, for the purpose of instituting comparisons on a large scale.

In fact, a large number of patients, where the student passes from one to another, in quick succession, only bewilders and distracts him. The

impression made by one, is effaced by that of another, and he goes away with but a confused remembrance of the whole.

In private practice, under an intelligent preceptor, all the conditions necessary to full clinical instruction may be enjoyed. The student may meet his teacher at the bed side of the patient daily, and may make his visits there often, and watch to his full satisfaction, and, if he chooses, with book in hand, the changes of the disease, and the effects of medicine.

This cannot be done by any considerable number of students in a Hospital. Even in Paris, where so many resort for the exclusive purpose of clinical instruction and observation, there is very little satisfaction to medical men of profound knowledge and mature experience, not to speak of students, in following the public teachers through their wards. When even such men wish for opportunities of observation, they make a private arrangement with an *interne*—an inferior officer in the Hospital—and make their visits at hours when the Professors are not there. (See letter of Prof. A. Flint, from Paris, published in the "Louisville Western Journal of Medicine," Sept. number,) Prof. F. says, "I will remark now that generally those at whose service I have been present, make their examinations very hastily, devoting but a brief space of time to the patients individually, relying mainly on the *internes*. In this particular I am surprised and disappointed." He proceeds to say that with a single exception he has seen no notes of symptoms made at the bed-side, nor any evidence that such records are made, &c.

We will not here describe the farces we have repeatedly seen enacted in some of our large Hospitals, where a class of students follow the physicians through their crowded wards. Everybody knows that the result too generally is, that the physician is disturbed, the patients annoyed, and the students confounded. A very small portion of those who take the ticket of the New York Hospital, for instance, regularly attend the visits. After their curiosity is satisfied by a few times crowding through the house, they wisely determine to occupy their time more profitably.

We have thus far been speaking of the disadvantages of Hospital Clinics, where the student is supposed to have time at his command to devote to this kind of instruction—and what shall we say of pursuing it at the same time that lectures are listened to in the medical colleges? We need not dwell upon this subject, for we feel confident that our readers will agree with us, that the best possible clinical instruction—the best mode of practically teaching the elements of the profession, is to do so at the

bed side of the sick, in the very field of practice upon which the student is to enter. That this is the case there cannot be a shadow of doubt. Still we are by no means disposed to deny that Hospital instruction may be made useful. Indeed, we think it may in a high degree. The fact that it is conducted in a manner to render it almost, and in some instances even worse than useless, is no argument against its utility within its proper limits, when rightly conducted; any more than that because all private preceptors do not give clinical instruction correctly and efficiently, that, therefore, private teaching is useless.

Our position is, that private clinical teaching is *most* useful; yet that Hospital teaching under proper management has certain advantages—advantages arising from a larger number of cases at command;—having a variety from which to select subjects of study—from the cases being sometimes more accessible, and more under control; but in order that these advantages may be made available in teaching, several conditions must exist.

In the first place the student must be well grounded in the elementary branches of medical science, and in a knowledge of pathology and therapeutics, before he can receive with advantage this kind of instruction. He must be in every sense, an advanced student. This remark needs no illustration or proof.

In the next place, he must have full opportunity for a careful personal examination of the patients. This necessarily requires considerable time with each patient, and a limited number of persons present.

He should not only listen to the instruction of his clinical teacher, but he should refer to books in connection with the case, and “read up” the diseases which he sees. As already intimated, he should watch from day to day the progress of the disease and the operation of medicines, and have time for reflection and thought.

With an able teacher, thus devoting time to Hospital instruction, advantages can but be realised, but it must be seen at once, that this kind of instruction cannot proceed during a course of lectures as, they are pursued at present, in our medical colleges. The utter absurdity of attempting to add this amount and kind of instruction to six or seven lectures per day, on as many different subjects, besides attention to practical anatomy, &c., is too apparent to require any thing farther than the statement of the proposition.

If Hospital instruction be given to any sort of advantage, indeed if it

do not serve as an actual hindrance to the student in his real scientific progress, it must be given during the interim of lecture terms in the colleges, at least, while those lectures are conducted in any thing like the manner they now are, and, after the lectures have been listened to, to a sufficient extent to have the student well grounded in the principles of the medical art.

We have now occupied so much space upon this subject, because its importance demands it. Great efforts are being made at the present time, to magnify the importance of Hospital instruction;—and there is much danger of the most valuable kind of clinical instruction—that of the private preceptor in the daily walks of ordinary practice, being overlooked and neglected.

A. B. P.

Dr. Hamilton and Dr. Watson.—Elkoplasty, &c.

In the last number of this Journal we referred to the fact, that Dr. Detmold, of New York, had shown that he had performed and published operations for ununited fractures, by piercing the ends of the fragments of bone subutaneously, several years prior to similar operations supposed to be original with Dr. Branard, and for an essay containing an account of which he received the prize of the National Medical Association. In the *New York Journal of Medicine* for November, Dr. John Watson, one of the surgeons of the New York Hospital, and a gentleman of much learning in surgical science, is out in a well written article showing that Dr. F. H. Hamilton, of Buffalo, who has lately published a case of “Elkoplasty,” or “Old ulcers healed by Anaplasty” as a novelty, has been anticipated both in his proposal, and in his results, by Dr. W. himself.

Dr. Hamilton claims to have suggested the operation in 1846, and to have performed it last January: While Dr. Watson shows that he performed one operation of the kind in April, and another in July, 1844.

The first was for the case of an old ulcer upon the forehead, and was reported in the *American Journal of Medical Sciences*, for October, 1844, and its details were reproduced in the first volume of *Mott's Velpeau's Surgery*, which was published in 1845.

The second case of Dr. Watson's was an ulcer of the foot, the particulars of which he gives from his note book, and which are recorded in the New York Hospital Case-Books. Both operations were successful.

Dr. Watson says he might refer in this connection to several others of

more or less importance, in which similar anaplastic measures have been adopted at the Hospital by his colleagues and himself, for the removal of deformities, the closing of fistulous ulcers, and the covering of ulcerated stumps; but he thinks that they are so common, and so clearly only special applications of already well established rules of anaplastic surgery, as not to be entitled to be spoken of as novelties.

It would seem strange that one who has been a teacher of surgery for many years, should have overlooked a case of this character, not only published in the leading Journal in this country, but having found its way into a great standard work on operative surgery;—or that having seen it, he should have forgotten that he had derived the idea from a source without himself, and supposed it original.

It is important that those who wish to enlighten the profession with novel processes in surgery, should have good memories. Dr. Watson regards the announcement of surgical operations and other performances, as novelties, which have no claim to be so considered, as an increasing evil. We hope for the honor of the profession that so far as the evil exists, it will cease.

But we promised in our last number to give a Synopsis of Dr. Hamilton's pamphlet which was placed upon our table, and which contains what he calls "a new mode of treatment for delayed or non-union of a fractured humerus," as well as "Elkoplasty, or Anaplasty applied to the Treatment of Old Ulcers."

The part of the pamphlet relating to "Elkoplasty," contains nine pages, written as previously stated, in Dr. H.'s easy style, though we cannot commend it in all cases for precision, and is in the form, for the most part, of a clinical lecture.

He first refers to the proverbial obstinacy of old ulcers, and says, that where the health of the body and the limb is good, the refusal of the ulcer to heal is entirely owing to the extensive loss of integument. He says that, "actual loss of skin is repaired by one or both of two processes. By the development of new, from or upon the free margin of the old skin, or by the contraction of the granulations and of the cicatrix, in consequence of which, the adjacent skin is drawn towards the chasm, and made, as it were, to slide over and cover it in." He says that after a long delay in some exceptional cases, the granulations acquire the power of forming new skin at various and isolated points of the sore; but cases of this kind are very rare, and as a very general rule, if ulcers are not

closed by either the projection of new skin, from the margins of the old, or by the contractions of the granulations and cicatrix, then they must remain open. "To the action of both these processes there is a limit. The formative power of the old skin does not extend beyond a few lines. The new vessels, [by this we suppose is meant the extension of the old vessels,] becoming more and more attenuated as they stretch in from the periphery, lose at length the power of generating epithelial cells, [We cannot suppose our author means to be understood as saying that the vessels really generate cells, as the language would seem to imply, but simply, if he had a precise conception of what he was saying, meant to state that they furnished the materials for their formation. The expression, however, seems loose and unfortunate.] or, if formed, they are too imperfectly organized to sustain an existence, and they crumble away from the slightest provocation." These efforts he describes as being repeatedly made, but proving unsuccessful; at the same time the granulations have ceased to contract, perhaps because the skin adjacent has reached its utmost tension and will stretch no farther, here forever ending the process of closure, and the "old ulcers of 1830, will be old ulcers in 1850."

"Nature," he adds, "has done its utmost, and hitherto art has failed to complete the work." It is this assertion that Dr. Watson controverts with his published facts, and as we think successfully, having shown that he had used the process which Dr. Hamilton proposed, which in his, (Dr. H.'s) own words, was "to close the ulcer by an operation of anaplasty. In short, to imitate one of the processes of nature, by sliding in old skin to repair a waste, where the process of forming new skin has ceased, and been given up."

It is true that Dr. H. proposes to take the skin from a distant part—the other limb, in the case before him, whereas Dr. Watson took the skin from the neighborhood of the ulcer in his cases; and in so far as this is concerned, Dr. H.'s operation was a modification of Dr. W.'s, and should have been stated as such, and not as a new operation where "art had hitherto failed to complete the work."

It is also true that Dr. H. proposed another modification; that of transplanting a piece of skin *smaller* than the ulcer, upon its *centre*, and trusting to its growth to complete the cure: or as he expresses it—"I hope to establish a new centre of life—an oasis—from whose outer verge a true and healthy vegetation shall advance in every direction over the exhausted soil."

He states farther, that he regards it not impossible that the graft will expand by being stretched by the contraction of granulations around its margins, and may be made more smooth than though the transplanted portion covered the whole surface of the ulcer.

Dr. H. then refers to a report of a Surgical Clinic at Geneva Medical College, for 1846, and published in the "Buffalo Medical Journal," in which he proposed the operation he since performed, and which he proceeds to relate.

The patient was an Irish laborer, who in 1852, had the skin and flesh extensively torn from his leg, leaving an ulcer, which had repeatedly nearly healed, but never entirely, the whole giving way after exercise.

The operation consisted in raising a piece of integument from the calf of the opposite leg, extending through the cellulose-adipose textures until the fascia was in sight, and measuring in extent seven inches by four, leaving a broad and thick base of attachment. Lint was spread on both surfaces with simple cerate and laid between the flap and its bed, wrapping the whole in cotton batting and securing with a roller.

After two weeks, hæmorrhage occurring in the mean time, the granulations, and a part of the cicatrix from the diseased leg were dissected out, and the flap freshened with the knife and applied upon the ulcer, binding the legs immovably together. After two weeks of this confinement, during which time the patient bled not a little, notwithstanding the application of ice, his appetite being bad and his bowels not having been moved, the base of the flap was separated from the leg from which it had been raised—the parts dressed, and the patient given of sulph. mag. \mathfrak{z} j. The next day, no effect being produced, the dose was repeated, and the next day, one corner of the extreme end of the flap began to slough. The next day still the slough continued—bowels moved: but under yeast poultices, &c., on the fifth day after sloughs commenced, a line of demarcation formed, and in about one hundred days from the time the flap was laid down, the healing was completed on both legs; and three months thereafter remained healed, though the man had been about the wards of the hospital acting as a subordinate dresser.

The health of the man was however bad from his long illness, and prolonged confinement in bed. The cicatrix around the new skin is tender, the ankle is somewhat stiffened by the contraction of the skin, &c., produced by the original injury; but the opinion is expressed that there will be farther improvement. The flap, at the latest account, was stretched outward, and was much smoother than at first.

This is more than a Synopsis of the case first promised, but it is one of so much interest in itself, and possessing such interest from its relations, that we have given our readers a full opportunity of judging of its character, and whether under the same circumstances they would like to repeat the operation.

Of the part of the pamphlet referring to the fractured humerus, we have not space to give an extended notice. The arm was dressed by a good surgeon in the usual angular position. In six weeks after, union had not taken place, and the elbow joint was stiff.

The treatment consisted in puncturing the upper end of the lower fragment with a small steel instrument, which was also thrust between the fragments. This was done after the arm was straightened; and a gutta percha splint was then applied, keeping the arm in that position. Within forty days a union occurred.

The novelty of the method consists in dressing the arm straight—and the reason for the procedure is that the joint becoming stiff, each movement of the hand causes the lower fragment to move to and from the upper, and not as upon a pivot, when the elbow is bent. When the arm is extended, it is alleged that the movements of the fragments, if they occur at all, will be as upon a pivot—the ends remaining together—and not as when dressed in the angular or bent form, the lower fragment moving to and from the upper.

The suggestion is doubtless worthy of attention.

Supposed Case of Cholera.

In the November number of this Journal, a correspondent reports a case of disease which he very graphically describes, and which he believes to be a case of Genuine Epidemic or Asiatic Cholera — and at the conclusion of his article requests that if any of the medical fraternity shall not agree with him as to the diagnosis of the case, or in any statement made in the article, he would be glad to hear from them through the Journal.

As no one has as yet furnished any statement on the subject, and as we do not see evidence of the case being Epidemic Cholera, we will say a few words in relation to it:—

So far as our observation extends, those cases of genuine Epidemic Cholera not attended with the characteristic discharges, present appearances quite different from those described in this case. They are usually

the severest and most rapidly fatal cases of the disease — cases where the cholera poison is in such abundance, or the powers of resistance to its influence, are so feeble, as that the system yields to it, almost without a struggle—and the patient is soon prostrated and collapsed, with cold and leaden surface; slow and labored breathing, and nearly or quite imperceptible pulse; all these symptoms, with the peculiar shrunken condition of the skin, occurring speedily; and the cases almost or quite invariably terminating fatally in a short time. They may, or may not be attended with pain and cramps; never, however, to our knowledge, with such violent paroxysms, manifesting such extravagant outcries, and such a physical resistance to control as the case described. Of course the diagnosis of a case from a description by another, must always be more or less uncertain; but it seems to us this patient was laboring under a severe attack of Spasmodic Colic, or spasmodic pain either in the colon, or other intestines,—in the biliary ducts or stomach, arising from causes which we do not pretend to define, acting upon an excitable and sensitive system.

With regard to the treatment, we think it was very well. The bleeding had a tendency to overcome the spasm, and also the congestion which probably existed, and to prevent inflammatory symptoms, which, in such cases are apt to supervene; as well as to render the anodynes and anti-spasmodics more effectual;—but we must confess that some of the reasons assigned for practicing it, viz: that of appeasing the intense solicitude of an excited company, and of allowing the physician farther time for observation of the disease, do not seem to us to be the proper ones for adopting so powerful a remedy. The other reasons given, viz: that it would have a tendency to calm the terrible agitation of the patient, and would not prove detrimental to him in other respects, are quite legitimate.

We are reminded by this of the advise said to have been given by an older Judge to a younger brother, who had risen to the bench — which was, never to give a *reason* for his opinions:—as his instinctive sense was good, his opinions were likely to be right, but the lawyers might puzzle him if he gave his reasons. This advise might be modified to physicians by saying, be careful to give a good and sufficient reason when one is attempted — and never to use in practice any active means, without a good reason. When it is desirable to gain time, use *placebos*; but never attempt to amuse the patient, or appease his friends with means that may do harm. A medical professor once said to his class —“Gentlemen, if you are in doubt what to do, (as the best of us frequently are), for Heaven’s sake don’t give calomel;” and the same remark might be

properly made with regard to all active measures. It has long been a reproach to our profession that we strike in the dark, and that in thus striking we may hit either an enemy or a friend;—our blow may fall upon nature or upon the disease. Let us strike in the dark as seldom as possible. The motto of David Crocket should never be lost sight of by the physician — “Be sure you are right, and then go ahead.”

Buffalo Medical Journal.

The Buffalo Medical Journal, in a leading editorial article, headed, the “Medical Department of the University of Buffalo,” and bewailing the present condition of the Medical Schools, says: “They have fewer students than eight or ten years ago, while at the same time more men of means, education, and gentlemanly affinities, are seeking the medical profession. It is probable that the cheap and gratuitous Schools absorb a large portion of that class of students who crowded the lecture rooms of all Colleges a few years ago, but it is equally demonstrable that uneducated boors are not as common anywhere.”

In these sentences, though insinuating in their character, no one can mistake the idea the Journal means to convey, viz: That what it calls the cheap and gratuitous Schools, (by the latter expression meaning the Medical Department of the University of Michigan, as there is no other Free Medical Schools in this country, though the Medical Schools are all so in Paris, and in most other parts of Europe, supported, as is this, by the liberality of the State,) that these Schools receive a large portion of what the Journal calls the “uneducated boors” who are still found in the Medical Colleges; and that “men of means, of education, and of gentlemanly affinities,” seeking the medical profession, in obedience to their “affinities,” go to such “gentlemanly” Schools as are to be found at Buffalo and—we cannot say where else! Of the modesty and gentility of this allusion we have nothing to say,—its truth we utterly deny. It is true we know nothing of the “means” of those seeking medical honors in the University of Michigan; we have no process of testing the length of their purses; but we have a means of testing their “education,” in the preliminary examinations, in the requirement of bi-weekly thesis, and in the daily examinations by each professor, upon the subjects of the preceding lecture; and we have at least equal opportunities with others, of judging of their gentlemanly affinities; and we find true what we should suppose would be the case, that, where *knowledge* and not *money* was made the test of admission to

the highest privileges and honors of an institution, that it would attract to its instructions those of cultivated minds and manners, and of a high tone of moral and gentlemanly bearing; and from our knowledge of medical classes generally, which is not limited, at least, so far as this country is concerned, we would be quite willing to compare *any* thirty of our present one hundred and forty or fifty, in any qualities of education and gentlemanly conduct, with the thirty that are at Buffalo. In this remark we do not intend to speak in the least degree disparagingly of the students in the Buffalo Medical College. The specimens of students we have from Buffalo and vicinity, and we have several, are both intelligent and gentlemanly, and we do not believe they will be induced to leave the Michigan University, notwithstanding the Journal's opinions, for fear of being associated with "uneducated boors."

A. B. P.

On the Construction, Organization, and General Arrangements of Hospitals for the Insane. By THOMAS S. KIRKBRIDE, M. D., Physician to the Pennsylvania Hospital for the Insane. Philadelphia: Lindsay & Blakiston, 1854. (From the Author.)

The work with the above title is a very neatly got up volume of eighty closely printed pages, which we find on our table.

We have looked over the contents with much interest, knowing it to emanate from a gentleman thoroughly acquainted, from long experience and much observation, with every department of the subject, and of the most reliable good sense and discrimination.

Nearly one half of the volume is devoted to the subject of *Construction*, in which every thing about the building of Insane Hospitals, from the appointment of building commissioners to the finishing of every distinct part — and the cost of the whole according to the plans given, is considered. No one item in the construction is omitted, and the best mode of doing every thing as it regards the building, and of supplying every thing is described.

The last half or more of the volume is devoted to "Organization and General Arrangements;" in which the officers and persons for all purposes necessary in an Institution are specially treated of, and the duty and compensation of each described.

The work is not designed to furnish to the Profession information on

the subject of the Pathology and Therapeutics of Insanity, but every thing else connected with Hospitals for the Insane is embraced within its scope.

We have no doubt that it is an admirable work, and no one who wishes to understand the subject, or who is in any way connected with Institutions of the kind, can afford to be without it.

We are glad to hear as much as this—and hope the committee will remember that those more remote from New York have as keen a curiosity to see the work as eastern Yankees;—and the distant Journals especially have as good a right to an early *look* at, and an early *say* about the contents, as those nearer the place of publication. On some former occasions, some of the Western Journals have not seen the Transactions until after the profession generally had read elaborate notices in the Eastern Journals, and the freshness and novelty of the work had passed by.

The injustice of this must be apparent. There is, no doubt, a great deal of labor connected with the getting out of this volume, and we have perhaps no right to complain of delay as yet, but the *three* months spoken of at St. Louis are already more than doubled.

Chemical Analysis.

We call attention to the advertisement under this head. The well-known precision and skill of Prof. Douglass in chemical investigations renders his analyses second to none in the nation for correctness and reliability.

New York Academy of Medicine.

We observe that the New York Academy of Medicine has been enabled, by the liberality of a few of its "Fellows," to offer a prize of *One Hundred Dollars* for the best essay on the *Nature and Treatment of Cholera Infantum*, to be presented any time during the coming year. Competition is not confined to the Fellows, but is extended to the whole profession throughout the country. This must be regarded as an evidence of increasing vitality in the Academy.

A report of a "*Committee on dividing the Academy into Sections*," was also presented at the same meeting, recommending such a division in place of the old scientific committees—these last embracing only a small portion of the members, while the "Divisions" are to embrace all, and assign each member a place for labor.

It is hoped the change will be an improvement. As yet this society has not accomplished as much for the cause of Medical Science, as its location and the numbers and character of its members would seem to promise.

Transactions of American Medical Association.

The New York Medical Journals announce that the publication of the transactions of the American Medical Association has been pushed forward with zeal, and that the volume will soon appear.

Transactions of the American Medical Association. Vol. VII. 1854.

Just as the Journal was going to press, we received the above volume, and can only make the announcement.

It is not as large as some of its predecessors, but presents a neater and more tasty appearance. We shall commence a notice of its contents in our next.

Errata.—We make the following corrections of the article on Cholera Infantum, by Dr. Miller, of Chicago, which should have appeared in the preceding No. of the Journal:

On page 166,	4th line from bottom,	for "choline"	read <i>choleric</i> .
" "	171, 2nd " "	top " "cuf"	" <i>cry</i> .
" "	174, 12th " "	bottom " "pyntic"	" <i>pyretic</i> .
" "	175, (in 1st formula,)	" "sac. lactis ij"	" <i>sac. lactis ℥j</i> .
" "	176, (formula, middle of p.)	" "taurine"	" <i>tannin</i> .

MSCELLANEOUS.

The Sugar-House Cure.

[Dr. Cartwright of New Orleans, has for some time past been calling the attention of the medical public, to what is called "the Sugar-House Cure, for bronchial, dyspeptic and consumptive complaints." The treatment consists in living more or less constantly in a sugar-house during the season of boiling the cane juice at the south, and inhaling the steam loaded with an aroma, and with saccharine particles, and sometimes drinking freely of the juice &c.

The Memphis Medical Recorder makes the following remarks upon the subject, and in another part of the Journal we give a somewhat lengthy but lively picture of a case in the process of treatment, and as the patient thinks cure, from the Boston Medical and Surgical Journal.]

Dr. Cartwright appears in the Boston Medical Journal, with another paper "on the sugar-house cure for bronchial, dyspeptic, and consumptive complaints." He says, every sugar estate proves the fattening qualities of the respiration of the sugar-house vapor in the rolling season; and to this tendency to fatten by enriching the blood, he attributes, mainly, its remedial power in the above diseases. The fattening properties of cod liver oil he considers far inferior and less certain, and instances a very lean and consumptive patient, who fattened to the extent of fifteen pounds in less than three weeks time, by living in a sugar house. This patient lost his ravenous appetite on breathing the vapor of the boiling cane juice, and seldom ate any dinner, but lived mostly on the cane juice. It seems, therefore, that he not only respired the saccharine vapor, but kept his digestive organs well supplied with the more substantial juice, and perhaps the syrup, to the exclusion of other and less digestible diet. It may be doubtful whether, in this case, the saccharine food were not the more important remedy. It has long been observed, that negroes on sugar plantations fatten during the sugar making season; but we have never heard that this effect was confined to those who work in the sugar-house, exposed to the vapor from the boilers. If not, this circumstance might tend to impair the force of the Doctor's argument. But perhaps we shall have this matter explained in the forth-coming paper which he promises, in a future number of the same Journal. The idea that consumptive complaints are benefitted by inhalations of these vapors, may be equally new and valuable; but that saccharine food is powerfully remedial in certain forms of dyspepsia and by consequence relieves pulmonary complaints which are mainly dependent upon such dyspepsia, is not new. The value of such diet in cases of this kind, and in certain forms of infantile diarrhoea and marasmus, is not likely to be over-estimated.

Influence of the Physician.

“How many thousand faces must have passed before the doctor’s eye’s; how many pitiable tales of woe must have been poured into his ears; what awful secrets must find a repository beneath that black satin vest! We may lie to the lawyer, we may lie to the confessor, but to the doctor we cannot lie. The murder is out. The prodigal pressed for an account of his debts will keep one back; the penitent will hide some sin from his ghostly director; but from the doctor we can hide nothing, or we die.—He is our greatest master here on earth. The successful tyrant crouches before him like a hound; the scornful beauty bows the knee; the stern worldly man clings desparately to him as the anchor that will hold him from drifting into the dark sea that hath no limits. The doctor knows not rank. The mutilated beggar in St. Celsus’s accident-ward may be a more interesting case to him than the sick duchess. He despises beauty—there may be a cancer in its bloom. He laughs at wealth; it may be rendered intolerable by disease. He values not youth; it may be ripe for the tomb, as the hay for the sickle. He makes light of power; it cannot cure an ache, nor avert a twinge of gout. He only knows, acknowledges, values, respects two things—life and death.”—*Household Words*.

Chloroform, or its vapor, has been used frequently to produce local anasthesia, since Hardy’s paper in the *Dublin Journal*, in Nov., 1853.—The results have been variable, but in many cases insensibility has not been caused. Figuier has used *warm* chloroform vapor, a little apparatus being used, with a small spirit-lamp, over which chloroform vapor is driven.—*British and Foreign Med. and Chirurgical Review*.

Delirium Tremens.—*Tartar Emetic*.—DR. PEDDIE (Monthly Journal, June,) discountenances the treatment by opium, and recommends, from an experience of eighty cases, the use of tartar emetic, in doses of from one-quarter to one-half of a grain every two hours. If the bowels are not opened by this remedy, compound jalap powder is given. The patient is not to be restrained by mechanical means, and light is freely admitted into the room, as by its means optical delusions are prevented.—*Id.*

Digitalin.—DR. SANGE has employed digitals in intermittent fever and in dropsy. In six cases of the disease cure was not effected in a single case, even after eight to ten days’ use. In dropsy, diuresis was scarcely ever observed; in one case of general renal anasarca, after eight days’ use of the remedy, there was for forty-eight hours some increase in the flow of urine, but this then disappeared. In three cases of cardiac dropsy the heart’s action was lessened in one (after 1-60 grain doses every three hours), but there was no diuresis, although the specific effects of the digitalin were thus evident. In the two other cases there was no diuresis whatever.—*Id.*

Dropsy (Ovarian) Iodine.—DR. SIMPSON (Monthly Journal, May,) refers to seven or eight cases of ovarian dropsy, in which, after tapping, tincture of iodine (two or three ounces) has been injected into the sac.—In two or three cases the disease seemed arrested, but in the others this

was not the case. No great pain followed the injection, and no febrile symptoms, except in one case.

Epilepsy.—Oxide of Zinc.—The oxide of zinc, so strongly recommended by Herpin in epilepsy, (see No. 22, p. 409,) has been tried both by Moreau and Delasiauve. Moreau experimented on eleven patient's, and rigorously observed Herpin's instructions, but the results were completely negative. Delasiauve's experience, on a still larger scale, is to the same effect. In reference to the employment of the oxide of zinc, we may mention the interesting observation of Michaëli's, who, in experiments on animals, found the zinc in the liver, bile, blood, spleen, lungs, heart, brain, and urine. The oxide appears to be dissolved by the lactic acid in the stomach; it should, therefore, not be combined with magnesia, which would neutralize the acid.—*Ib.*

Erysipelas.—Tincture Iodine.—DR. DURKEE (Amer. Jour. of Med. Science, July; p. 108,) recommends the local application of the ætherial solution of iodine, poured in quantities of twenty to thirty drops upon the part, and immediately spread over the surface with a brush. The skin is to be made nearly *black* with the iodine.

Iodine Inhalations.—For patient's for whom such inhalations are ordered, Dr. Barrere recommends the following plan: Powdered camphor is placed in a small box, and over it a muslin bag is placed, containing a little iodine. The vapor of iodine is absorbed by the camphor, which assumes a dark color. The compound thus formed (campho-iodine) is inhaled.

Labors (Slow).—Belladonna.—DR. SOMA relates three cases, to show that the extract of belladonna excites, like the ergot of rye, the uterine contractions, and may be substituted for it, especially in cases of spasmodic vomiting. Of course it is to be employed only in cases in which the os is dilated and the position of the child favorable. The dose is not clearly stated, but appears to have been large (about half a grain) and the medicine was given every ten minutes for two or three hours.

Lead, Poisoning by.—Iodide of Potassium.—In twenty-three cases of saturnine disease—including colic, neuralgie, arthralgia, wrist-drop (4 cases), and general paralysis (6 cases),—the iodide of potassium has been used by Dr. Swift, as recommended by Melseus. Sixteen cases were cured; three so far relieved as to be able to resume their occupations; and four were gradually improving at the time the report was made. "In thirteen cases the urine was submitted to chemical analysis, and the investigation has established the fact, that the lead may be eliminated from the system by the iodide of potassium and found in the urine. In no case was lead detected before the administration of the remedy. The analysis was made by Prof. Outram, and the results of his experiments are perfectly reliable." In one case the lead was detected also in the saliva.—*N. Y. Med. Times.*

Quinic Ether.—A discovery which has lately been made in Italy, and which has excited much attention, is illustrative of the results of perseverance and industry. In the month of June, 1852, a young man, M. Louis Manetti, a student of the University of Pavia, happened to

witness the death of a patient with congestive fever, who died apparently from the impossibility of introducing into the system, in a short time, a sufficient quantity of quinine. Manetti was struck with the idea that the principle of the bark might be effectually administered through the medium of pulmonary absorption. Encouraged by Professor Pignacca, Manetti began a series of investigations, the results of which are detailed in a letter from Prof. Pignacca, to Dr. Stambio of Milan, a translation of which is found in the "*Annales de la Société Médicale de Grand.*" Prof. Pignacca has called the new agent for inhalation *Quinic Ether*, probably for want of a better name, for it is not, properly speaking, an ether, and its positive chemical composition is not known. It is a liquid of a special inconstant odor, and is obtained by the distillation of quinate of lime (*quinat de chaux*,) combined with alcohol, and is analogous to the ethereal bodies in general, volatilizing like them. Professor Pignacci states in his letter that he has administered this fluid by inhalation to eight patients; seven of them had tertian intermittent fever, the last neuralgia of the fifth pair. The neuralgia was of an intermittent type. The remedy acted admirably, both in the cases of fever and in the case of neuralgia. The quantity of the agent given is about a scruple at a time, repeated three or four times a day. It is administered in the same way as chloroform, and it produces sensations somewhat similar.—*N. O. Medical News and Hospital Gaz.*

Lime, Phosphate of.—Dr. KUCHENMEISTER recommends the following formulæ in cases in which phosphate of lime is indicated: Calcis phosphate, $\mathfrak{z}\text{ij.}$; calcis carbon, $\mathfrak{z}\text{j.}$; sacch. lactis, $\mathfrak{z}\text{iiij.}$, $\mathfrak{z}\text{ss.}$ bis terve indie. Instead of milk-sugar, lactate of iron may be substituted, if iron be required. The especial use of the carbonate of lime appears to be that carbonic acid is liberated by the acid of the stomach, and dissolves the phosphate. Lactic acid is formed from the sugar, or is set free from the lactate of iron and dissolves the phosphate. The most ready way of absorption is, however, when the phosphate is given with food, especially milk, with which it forms a soluble combination.

Pneumonia.—*Chloroform.*—DR. STOHANDI relates three pneumonic cases in which, many times, from 30 to 60 drops of chloroform were inhaled, with great benefit, after the manner of Varrentrapp. The pain, the dyspnoea and oppression, were always relieved for some time (4 to 6 hours,) when the inhalation was again resorted to. The author believes that the chloroform acts as a deoxidizing agent on the blood, and lessens its plasticity.

Chlorate of Potash.—DR. LACQUET has used this medicine in five cases of acute rheumatism; he gives about 150 to 170 grains in 24 hours, and sometimes he has given more than this. The mean duration of the disease after the commencement of treatment was twelve days.

Re-Vaccination in the Prussian Army for 1853.—During 1853, 44,652 men were re-vaccinated. Of this number 32,642 presented decided vaccine scars; in 7,643 the scars were doubtful; and in 4,367 there was an entire absence of scars. Re-vaccination produced a regular vaccine vesicle in 28,329 persons; an irregular one in 5,933; and failed

entirely in 7,664. Hence re-vaccination succeeded in 69 cases out of a 100. A table of those re-vaccinated in the Prussian army for the last twenty one years shows that the number of cases in which re-vaccination succeeds, has been gradually increasing from 33 in 100 in 1833 to 69 in 100 in 1853, with almost entire regularity.—*Bullet. Gen. de Ther.*

Cholera.—Several cases of sudden death in high circles, have recently occurred in this city, with symptoms of cholera; these have appeared after the use of oysters, which, from some peculiar condition, seems to have been the exciting cause. For the moment, there is an *oyster panic*.—*N. Y. Med. Times.*

School for Idiots.—Dr. Gaggenbuhl of Switzerland, founded in 1842 a school for cretins. His plan is first to restore them to bodily soundness by proper treatment and then instruct their minds. "Weak and helpless boys and girls with vacant eyes, and skins wrinkled with premature old age, have by his fatherly care been changed within a few months into intelligent and healthful children * * * * have been rescued from their fearful state, and are many of them in a fair way of becoming sensible, well behaved and industrious members of society. * * * * The cures effected by Dr. G. are numerous and brilliant." The principal treatment seems to consist in light, fresh air, exercise, and proper food. According to the Glasgow Med. Jour., from which the above quotation comes, he begins to instruct only after the bodily health is rendered good. He sometimes teaches the letters by placing the pupil in a dark room where nothing else can attract his attention, and tracing the letters on the wall with phosphorus.

The success of his institution has caused many others to spring up in Europe and the reports from them are exceedingly gratifying to humanity.

Explanation of the frequency of un-united Fractures in the Humerus.—That industrious surgeon, Prof. F. H. Hamilton, of Buffalo, N. Y., has recently read a paper before the medical society of the county of Erie, in which he attributes the frequency of the non-union of fractures of the arm to motion of the fragments produced by partial ankylosis at the elbow-joint, which is the result of flexing the fore arm and keeping it in that position during the treatment. He thinks that the movements of the lower arm supposed to exist at the elbow, occur actually at the seat of fracture, and that thus immobility, so essential to union of bone, is prevented. He recommends the straight position of the arm, a long splint from the top of the shoulder to the hand, moulded to the limb, and secured by rollers, in the treatment of fractures of the humerus.

Any thing on the subject of *bones* from Dr. Hamilton, is worthy of particular attention, as he has devoted much study to fractures.—*Nashville Journal.*

Infantile Mortality.—In the cities of New York, Philadelphia and Baltimore, in one week, of a total number of 1725 deaths, 1025 were of children under five years of age.—*N. Y. Med. Times.*

Citrine Ointment—How to make it.—Mr. Wilde, of Dublin, calls attention to the fact, that the ointment of the nitrate of mercury as at present prepared does not keep well, and says no article of the materia medica presents the same differences, both in appearance and effects, as this one.

He finds cod-liver oil makes a good citrine ointment for ophthalmia tarsi, and various diseases of the ear.—*M. Press.*

Treatment of Cancer by Congelation.—Experiments are being performed in Great Britain, which promises to arrest if not destroy cancer by the local application of cold. Mr. Arnott of London, and Prof. Bennet of Edinburgh, are encouraging this treatment. Pounded ice with salt has been applied daily for five minutes at a time to a scirrhus mamma, with most happy results. The internal pain ceased, the tumor decreased two-thirds, and the patient slept well.

It is not contended that this mode of treatment will remove all the diseased mass, but that it will diminish it, and probably arrest cancer. At any rate, let the profession try the effects of cold, rather than have people subjected to the arsenic and caustic potash of the so-styled ignorant cancer curer.—*Nashville Med. Jour.*

Cod-Liver Oil Mixture.—Take the yolk of one egg; sugar, two ounces; orange flower water, one ounce; cod-liver oil, three ounces; essence of bitter almonds, one drop. This is for six or eight doses.

Turpentine Frictions in Cholera.—The French journals report favorably of very free frictions over the whole body, and especially the spine, in the treatment of cholera. In some cases it was used also internally, in doses of 20 drops.

Suggestions adopted at the meeting of the American Pharmaceutical Association, in regard to quack medicines.

1st. That this desire for medicine can be gratified in a legitimate way, by regular officinal preparations.

2d. That it is the duty as well as interest of the apothecaries and druggists, to advocate the use of the officinal medicines in lieu of the quackery of the day.

3d. That it is the rightful interest of regular pharmacutists to divert the thousands, which now annually flow into the coffers of quacks, into their own limited stores, where of right it belongs.

4th. This can only be done by a united and snstained action on the part of the pharmacutists and druggists of the Union, by which they will *practically* refrain from the sale or advocacy of secret medicines, and substitute regular official compounds for them, correctly labelled with name and directions for use.

5th. This course should receive the sanction of physicians, as the only one likely to remedy the evir, as the tendency to take medicine *ad libitum* is a feature of the Anglo-Saxon race, duly inherited by the American people, which, whatever may be its faults, is as much their nature as is the love of political and personal freedom."

We heartily concur in these resolutions.—*Nashville Med. Jour.*

LIST OF INSPISSATED ALCOHOLIC AND HYDRO-ALCOHOLIC EXTRACTS,

Prepared in VACUO, by TILDEN & CO., 98 John Street, New York.

EXT. ACONITI,		EXT. LEONTICE THALICTROIDES, [Blue Cohosh]	
" APOCYNII ANDROS.,	[Bitter Root.]	" LAPPI,	[Burdock.]
" " CANAB.,	[Indian Hemp.]	" MENISPERMI CANADEN.,	[Parilla.]
" ANTHEMIDIS,	[Chamomile.]	" MARRUBII,	[Horehound]
" ANTHEMIDIS COTULÆ,	[Wild Chamomile.]	" OXALIS ACET.,	[Sorrel.]
" ARTEMISIÆ,	[Wormwood]	" PHYTOLACCÆ,	[Poke Root]
" ASCLEPIAS INC.,	[White Indian Hemp.]	" PODOPHYLLI,	[Mandrake.]
" BELLADONNÆ,		" PAPAVERIS,	[Poppy.]
" CORNUS FLORIDÆ,	[Boxwood, Dogwood.]	" QUERCUS ALBÆ,	[White Oak.]
" CONII,		" " TINCTORIÆ,	[Black Oak.]
" CHIMAPHILÆ,	[Princess Pine.]	" QUASSIÆ,	
" CIMICIFUGÆ,	[Black Cohosh.]	" RHEI,	
" COLOMBÆ,		" RUMICIS CRISPÆ,	[Yellow Dock.]
" CHELIDONII,	[Celandine.]	" RUTÆ,	[Rue.]
" CYPRIPEDII,	[Ladies' Slipper.]	" RUBI VILLOSI,	[Blackberry.]
" CANNABIS IND.,	[Indian Hemp, Foreign.]	" SARSAPARILLÆ, AMER.,	
" COLOCYNTHIDIS,	[Colocynth.]	" " " COMP'D.,	
" " COMPOSITUM,		" " " RIO NEGRO,	
" CUBEBÆ,		" " " COMP'D.,	
" DIGITALIS,		" SABINÆ,	[Savin.]
" DULCAMARÆ,	[Bittersweet.]	" SANGUINARIÆ,	[Bloodroot.]
" EUPATORII,	[Boneset.]	" SOLANI LYCOPERSICI,	[Tomato.]
" FILICIS MARIS,	[Malefern.]	" STRAMONII,	
" GENTIANÆ,		" SPIRÆÆ,	[Hardhack.]
" GERANII MAC.,	[Cranesbill.]	" SAPONARIÆ,	[Soapwort.]
" HYOSCYAMI,		" SENNÆ ALEX.,	
" HELLEBORI,	[Black Hellebore.]	" SPIGELIÆ,	
" HERACLEI,	[Masterwort.]	" TARAXACI,	[Dandelion.]
" JALAPÆ,		" " RADICIS,	"
" JUGLANDIS,	[Butternut.]	" TRIFOLII,	[Red Clover.]
" IRIDIS VELSICOL,	[Blueflag.]	" UVÆ URSI,	
" LOBELIÆ INFLATÆ,		" VERATRI ALBI	[White Hellebore.]
" HUMULI,	[Hop.]	" VERBASI,	[Mullein.]
" LACTUÆ,	[Lettuce.]	" VALERIANÆ,	[English.]

PURE EXTRACT LIQUORICE.

We call attention particularly to this article which we offer in the form of Lozenges, put up in neat oval boxes, in pound tin cans, and in rolls of small size convenient for use. It has a light brown color, and possesses the peculiar flavor of the root, being entirely free of the burnt, bitter taste of that usually found in market.

FLUID EXTRACTS.

We have been induced to enter upon the preparation of *Fluid Extracts*, at the instance of many practitioners, who prefer them in cases where it is difficult to administer the solid Extracts in pillular form, and for the convenience of Apothecaries for prescriptions. They can be relied on as uniform and certain preparations; are put up in 4 oz. bottles with full directions, and in pound bottles for Apothecaries.

FLUID EXTRACT OF VALERIAN.—Prepared from the cultivated root, and possesses in a concentrated form, the active principles of the root in as pure and perfect state as can be obtained, and not liable to undergo any change.

FLUID EXTRACT OF JAMAICA GINGER.—Prepared from carefully selected root of Jamaica Ginger, and is warranted to possess all the valuable properties of Jamaica Ginger highly concentrated.

FLUID EXTRACT OF RHEI.—Prepared from the Turkey Rhubarb, and forms a very convenient and certain remedy, valuable as a domestic medicine for mild cases of diarrhœa, and for diseases of children.

FLUID EXTRACT OF RHEI & SENNA.—A combination is suggested instead of the use of either of the simple extracts in cases where a simple cathartic is required.

FLUID EXTRACT OF SENNA.—Prepared from the Alexandria Senna, combining aromatics, to prevent severe griping pains in the bowels. This is a very fine preparation of Senna.

FLUID EXTRACT OF CINCHONA.—Prepared from the Calisaya Bark, and possesses all the active principles as they exist in the bark itself. It is a valuable preparation as a tonic where it is desired to use the bark in substance; and in practice has succeeded well in intermittents, when Quinine was unsuccessful.

FLUID EXTRACT OF CUBEBS.—Prepared of officinal strength according to U. S. Pharmacopœia of 1850.

FLUID EXTRACT OF SANGUINARIA.—This preparation possesses all the valuable properties of Sanguinaria. It is one of the most valuable and important articles of the *Materia Medica*, and in this form is convenient and safe as a domestic medicine, as a tonic or expectorant in Croup, Hooping-Cough, &c.

FLUID EXTRACT OF HYOSCYAMUS.—A fluid preparation of this article of uniform and certain strength has been long required by the profession.

FLUID EXTRACT OF LOBELIA.—A preparation of this valuable plant, of specific and uniform strength has been much needed by the profession.

FLUID EXTRACT OF STILLINGIA.—Regarded as a valuable alterative, little inferior to Mercury in its action. Has a well established reputation in Scrofula, ulceration of the palate, throat, and mucous membrane of the nose, skin and other parts; also in chronic diseases, secondary Syphilis, &c.

FLUID EXTRACT OF CAPSICUM.—This will be found a convenient preparation when Capsicum is wanted, as is frequently the case in combination with other medicines.

FLUID EXTRACT OF GENTIAN.—There are numerous cases requiring the use of this tonic for a length of time, as the usual preparations are too weak and do not keep well, one which obviates both difficulties, is deemed desirable. We shall also prepare a compound extract of Gentian.

FLUID EXTRACT OF SARSAPARILLA.—Prepared from the Rio Negro Sarsaparilla root, in combination with several valuable alteratives, and has been used successfully in Rheumatism, Scrofulous affections and Syphilitic diseases.

FLUID EXTRACT OF SCULLCAP. A valuable nervine. Those who have used it, claim for it tonic properties, which give strength as well as quiet to the system; that it does not like other nervines leave the system in an excited and irritable condition. Successful in Delirium Tremens, Tic Doloieux, St. Vitas Dance, Convulsions, Tetanus, &c. It has recently been used in nervous cases with success, in which other nervines failed to give relief.

FLUID EXTRACT OF SERPENTARIA. A stimulant tonic, used in typhoid fever whether idiopathic or symptomatic, when the system begins to feel the necessity of support, but is unable to bear active stimulation. Its action may be much improved by combination with Cinchona, particularly in intermittent fevers. Employed as a gargle in malignant sore throat.

FLUID EXTRACT OF BUCHU.—Buchu is gently stimulant, with a peculiar tendency to the urinary organs. It is given chiefly in complaints of the urinary organs, as Gravel, Chronic Catarrh of the bladder, morbid irritation of the bladder and urethra, retention or incontinence of urine from a loss of tone in the parts concerned in its evacuation; also in dyspepsia, chronic rheumatism, cutaneous affections and dropsy.

FLUID EXTRACT OF BUCKTHORN.—The inferior quality of the preparation of Buckthorn usually sold, has induced a preparation which can be relied upon, and which will keep in any climate.

FLUID EXTRACT OF PAREIRA BRAVA.—This preparation has been often sought for, in diseases of the urinary passages, chronic inflammation and ulceration of the kidneys and bladder, dropsy, jaundice, &c.

FLUID EXTRACT OF UVA URSI.—Uva Ursi has reputation as an antilithic, and in gravel, chronic nephritis, Diabetis, Catarrh of the bladder, incontinence of the urine, Gleet, Leucorrhœa, Menorrhagia, &c.

NEW YORK STATE MEDICAL SOCIETY.

Medical Society of the State of New York.

"Resolved, That this Society having seen and examined, and several of them having used the various Vegetable Extracts, made by Messrs. Tilden, & Co., of New Lebanon, N. Y., and being satisfied of the valuable character of these preparations, hereby commend them to the members of the profession generally.

"Albany, February 6th, 1850."

BERKSHIRE MEDICAL SOCIETY

MASS. MEDICAL SOCIETY

FOR THE BERKSHIRE DISTRICT, June 2, 1850. }

Dr JENNINGS submitted the following:

"Resolved, That this Society having seen from various sources entitled to respect and confidence, commendatory notices of the excellency and purity of the various Medicinal Extracts, prepared by the Messrs. Tilden, of New Lebanon, N. Y., and having tested and used them ourselves, do most cordially recommend them to the Medical Profession."

H. H. CHILDS, *President.*

AMERICAN MEDICAL ASSOCIATION.

Extract from the Report of the Committee upon Adulterated Drugs.

MEDICINAL EXTRACTS.—In former years, it was difficult to get the various vegetable extracts of good quality, sometimes from their fraudulent adulterations, but more frequently, perhaps, from lack of skill and care in their preparation. Scarcely any could be relied on except some imported from Germany and London. Now, however, we have them prepared of excellent quality, at home, particularly by some drug houses of Philadelphia, and by Tilden & Co. of New-York. The latter have embarked largely in the business, and manufacture them of very fine quality.

UNITED STATES DISPENSATORY.

Edition of 1851, by Drs. Wood & Bache.

EXTRACT CONIUM.

Drs. W. & B. say of *Extract of Conium*:—"That imported from London has usually been considered best: but we have seen and tried the Extract prepared by Messrs. Tilden & Co. of New York, by evaporation in vacuo at low heat, and have found it superior to any that we had previously employed." For further notice, see pages 968 and 980.

CINCINNATI, Dec. 29, 1853.

To H. A. TILDEN, Esq.

Dear Sir.—For several months I have proposed writing you in relation to your medicinal extracts, and have postponed this with other matters until the vacation of our school, now existing.

I have long used your preparations, and have found them superior to the English or German. Your process is the only safe one, and must succeed in restoring a confidence in extracts long since declining, owing to the great adulteration and unskillfulness of their preparation. I failed in those preparations of extract of Belladonna to dilate a pupil, and succeeded most satisfactorily with a sample of yours in my cabinet. I am now using my small jar of extract of conii, in a case in which German Extract failed, and most successfully.

The consistence, gravity, taste and smell of your extracts, clearly demonstrates the superior mode of their preparation. Two thirds of the extracts of the day are charred in their evaporation, and are thus useless.

Two years since I purchased ten pounds of Extract Belladonna. (English.) Dr. Taliaferro of this city obtained one of these pots, and finding it very superior, called for and got a second pound. At my suggestion, he tried the second and found it worthless. On examination, it was charred.

I sincerely trust you may be sustained in your enterprise, and that American physicians may find in the medicinal extracts, those benefits and advantages, so highly commended by early writers.

That you may realize all your hopes and wishes—add greatly to the solid foundation so well laid in your business, is the expectation and desire of

Your Humble servant,

TOM O. EDWARDS, M. D.

Prof. Materia Medica, Ohio Medical College.

BERKSHIRE MEDICAL INSTITUTE, }
Pittsfield, Feb. 7, 1851. }

I have twice visited the establishment of Messrs. Tilden, at New Lebanon, N. Y., comprising their Botanic Gardens, Steam Mills, and Extract Works, and through the politeness of the proprietors, examined the raw material, the several processes by which the medicinal extracts are prepared, and a large number of extracts themselves. Some of these I have used in my practice during the past year. I take great pleasure in certifying that in my opinion the establishment supplies a long-felt want in the profession—efficient and reliable extracts—and I do most cheerfully recommend their trial to physicians.

H. H. CHILDS, *Pres't Berkshire Med. College.*

BOWDOIN COLLEGE, }
Brunswick, Maine, March 14, 1851. }

MESSRS. TILDEN & Co.,

Gentlemen.—Having visited your manufactory of medicinal extracts in New Lebanon, and inspected the various processes employed, I feel it my duty to state that they are admirably adapted to the end proposed, viz: to procure extracts which shall contain all the active principles of the plants from whence they are derived, possess efficacy and uniformity of strength, and which shall not be injured by keeping, by climate, change of temperature, &c. Your extract of *Conium*, prepared by steam, *in vacuo*, and from which the albumen and chlorophyle are separated, appears to me to be the *ne plus ultra* of extracts, and the same may be said indeed of the others. You have successfully brought all the principles of pharmaceutical science to bear upon your various processes, and although experience may possibly suggest some improvements, yet I candidly acknowledge that at present I know nothing to suggest, nothing to find fault with. That you may be rewarded for your enterprise and skill, is the sincere wish of

CHARLES A. LEE, M.D.,

Prof. of Materia Medica and Therapeutics.

PENNSYLVANIA HOSPITAL FOR THE INSANE, }
November 24th, 1853. }

MESSRS. TILDEN & Co.

Have the goodness to send to my address, "Pennsylvania Hospital, 8th and Pine Sts., Philadelphia," by Express, a jar containing twenty pounds of your best Extract of *Conium*. That we have heretofore had from you has been satisfactory.

Very Respectfully Yours,

THOMAS S. KIRKBRIDE.

MESSRS. TILDEN & Co.

INDIANA HOSPITAL FOR THE INSANE.

Gentlemen.—I beg to acknowledge the receipt of a jar of your excellent extract of *Conium*, prepared *in vacuo*. I have never used any extract of this drug that I have deemed so satisfactory in its effects as yours, and during the past year I prescribed no other in this Institution.

Believing that your enterprise must be liberally rewarded,

I am, truly, your obedient servant,

R. A. PATTERSON, *Superintendent.*

MESSRS. TILDEN & Co.

COLUMBIA, S. C., Dec. 15th, 1852.

Gentlemen.—After giving a very fair trial, and a very satisfactory one, I am satisfied that the extract *Conii* which you sent me, and which came to hand in fine order, is of superior quality, and deserves all the praise which has been bestowed on it.

Very respectfully, your obedient servant.

J. W. PARKER.

Resident Physician, Lunatic Asylum, S. C.

Dr. A. P. MERRILL, of Memphis, Tenn., in a letter dated Jan. 21, 1854, says:

Having succeeded in relieving a case of insanity by your Extract *Cannabis Indica*, I wish to inquire of you whether it is made from the India or American variety of Hemp *Cannabis Sativa*. Your Extract *Apocynum Canab.* has also done good service in dropsy, in my hands.

THE
PENINSULAR
JOURNAL OF MEDICINE
AND THE COLLATERAL SCIENCES.

VOL. II.

JANUARY, 1855.

NO. VII.

ORIGINAL COMMUNICATIONS.

ART. I.—*To the Editors of the Peninsular Journal of Medicine.*

HILLSDALE, M., *November 24th, 1854.*

GENTLEMEN,

I send you, by express, an *Enlarged Spleen*, which I consider one of the most beautiful specimens of the kind on record; the profession all agree that it is by far the largest they have ever seen or read of. I removed it from a man at an autopsy yesterday. I also send you a substance that I removed from the heart, which I consider to be a deposition of adipose substance. The largest piece was obtained from the *vena cava communis*, (which was enlarged,) a portion of the balance from the right auricle, (which was enlarged also,) and a portion from the right ventricle, (also enlarged.) The liver I found indurated and full one-third larger than natural: the gall bladder corresponded in size with the liver. The lower lobe of each lung was hepatized. I found about half a pint of fluid in the pleural cavity, with evidences of chronic inflammation. There was also ossification of the smaller branches of arteries from the aorta, the stomach, intestines, pancreas; kidneys, bladder, &c., healthy. I did not see the man prior to the autopsy, and am therefore unable to give you a

history of the case at present, but will report it soon. The man was about forty-eight years of age, would weigh about 148 lbs., and of spare habit. He was confined to the house but about one week before his disease. Never had much of intermittent fever, was always temperate; very industrious. The spleen weighed, when removed, 14 lbs. 7 oz., and measures ten and a half inches wide, four inches thick, seventeen and a half long, and three feet ten inches in circumference. You can form an idea of its position, by noticing a cut on its convex surface, which I made in cutting from the umbilicus to the pubis. It rested on the os pubis, covering the entire abdomen, except in the hepatic region, which was of course occupied by the liver.

If you think it worthy a place in the Anatomical Museum, please place it there, and credit me properly therefor; if not, please return it by express.

Yours truly,

E. D. CONE, M.D.

P. S.—I should have mentioned that I was assisted in the autopsy by my friends, Drs. Tuttle and Strong, of Reading,

ART. II.—*Case of Gun Shot Wound of the Head.—Death three-and-a-half months thereafter.* By E. D. CONE, M.D., Hillsdale, Mich.

MAY 30th, 1854, was requested to see Mr. A——, aged about 30, sanguine billious temperament, of regular habits, and a cooper by trade, who was reported to have been shot by Mr. ——, and supposed to be dying.

Accompanied by my friend, Dr. J. P. Randall, I repaired to his boarding house, to which he had been conveyed in a state of unconsciousness.

On seeing the patient it was found that his face and forehead was blown full of powder, and that there was a considerable swelling and echymosis of the upper lid of the left eye; and upon close examination it was observed that the ball (about the size of a buck shot) fired from a small pistol, had entered between the lids at the *inner canthus* of the left eye. We succeeded in passing a probe directly backwards about half an inch, and from thence, by curving it, obliquely, upwards and inwards about two inches, until the ball was distinctly felt, resting on or near the upper surface of the ethmoidal bone. In passing the probe fresh

blood issued from the mouth and nostrils. From the oblique direction the ball had taken, and the nature of the parts through which it had passed, it was deemed impracticable to attempt its extraction; the result therefore was left to nature. In about two weeks, by the use of cold applied to the head, and the exhibition of cathartics, alteratives, and diaphoretics, low diet, &c., he so far recovered as to be enabled to walk about the streets; but soon thereafter, on resuming labor at his occupation, he was suddenly seized with violent pain in the head, together with all the symptoms of inflammation of the brain, which however readily subsided by using treatment therefor, and he was soon able to be about again. I may remark that he had repeated attacks of symptoms of inflammation of the brain, always induced by attempting to labor at his trade, but which yielded to treatment, until the evening of the 17th of September following, when he succumbed to a similar attack about eleven o'clock.

Autopsy on the 19th. At the request of the Prosecuting Attorney, and accompanied by my friends, Dr. A. Cressey and Mr. A. Whelan, I proceeded to make an examination of the body. After removing the calvarium, the brain was found to be highly congested, the anterior lobes softened, underneath which, and resting on the os ethmoides, was found the ball very much flattened, together with several fragments of bone, the longest of which was about half an inch square, but oval in shape. The ball and fragments were enveloped in about two ounces of greenish pus. The dura matter in the vicinity of the ball had ulcerated.

The points of interest about this case I consider to be, the length of time he survived after the reception of the injury, the repeated attacks of inflammation of the brain and its members which so readily yielded to treatment; and the amount of pus that had collected without sooner producing more marked symptoms thereof, especially as the ball and fragments of bone were in close contact to the brain as foreign substance. I may remark that he continually complained of a *dull heavy pain in the region of the ball* during the intervals of his attacks, at which times it would become *excruciatingly severe*, with great external head, &c., &c.

Although disconnected with the surgical interest of the case, I may observe, that the affray occurred in consequence of jealousy (as is believed), and that although the perpetrator claimed it to have been an accident, yet he was indicted for murder, and upon trial was convicted thereof and sentenced to the States Prison.

ART. III.—*Cholera in Monroe County, Michigan.*

Able at last to keep my promise respecting the publication, in regard to the appearance of the cholera in our county, I will try to communicate my observations and experience, but without touching facts and incidents which are already generally known and established.

The first appearance of this epidemic was as usual, of such a nature; that doubts of its genuineness might prevail, especially when no regard was paid to the indications, counter-indications, and to its prevailing epidemic genius. As there has been until now neither preventive nor specific found, we are alas! always referred to fix our eyes upon the general character of the disease, to study the cause, the form, the individuality of the patients, and finally to treat them according to experience as an empiric.

Soon after its first appearance, the disease showed its evident forms, spreading in radiated and longitudinal circles from its points of beginning, everywhere claiming its victims. The precursory epidemic genius was gastric—nervous, generally merging into the disease, showing more or less the gastric or the nervous character, but in most cases blended together in such a manner that attentive observations and examinations were necessary to state the individuality and the form. It appears from the preceding, that indications in most of the cases did require the immediate application of an emetic, which was given in form of powdered Ipecacuanha, \oslash one dose every five and ten minutes until energetic bilious vomitings were caused. When, however, at the beginning, in the *stadia prodromorum* feruginous or greenish yellow bile, was vomited, or when the stools, by the intensive rosy coloration, after addition of nitric acid, indicated bile in sufficient quantity, these symptoms were considered as a counter indication and consequently no emetic given.

While many cholera discharges contain some bile, it requires a frequent analysis to acquire a sure look in regard to the color produced by nitric acid.

In very violent attacks there was neither bile in the stools, nor in the vomitings, it was found an absolute bile retention. In such cases and particularly in turgescence upwards, and in cases of so called *cholera sicca*, extraordinary copious bilious vomitings were usually produced by the employment of Ipecacuanha. The majority of the patients in whose cases

The use of an emetic was indicated, went quickly over to the stadium of re-action, the choleric face and voice disappeared—the pulse, the tone, and the turgor of the skin re-appeared. If, after the re-action was accomplished, copious white passages remained, the lunar caustic at one grain with $\frac{3}{4}$ iv. of strong coffee-infusion was found very medicinal. If, on the other hand, pains in the right hypogastric region, and sensations from uneasiness in the abdomen, did appear, produced from bile passed over too vigorously into the intestinal canal, in such cases a large dose of castor oil was given. If, in spite of the emetic, a higher degree of cholera was developed, tinc. valerian, in strong doses, with addition of musk and a minimum of opium was administered. In cases where it took the collapsed stage with turbulent, exhausting passages, about 10 grains of calomel with 1-16th and 1-12th grains extr. nuc. vomica, spir. every half hour, was found very efficient. In some peculiar cases of this form, the cajeput-oil and camphora in large doses produced the desired effect, and in the cold stage chloroform with turpentine oil, and frictions with nitric acid, oil of turpentine, chloroform, and alcohol, were successful. The strychnium with nitric acid and oil of turpentine, rendered in the erethic cholera, the most eminent services. In only one case subsequently, the typhoid followed, distinguished by its pertinacious, continual returning, with death menacing hiccough, singultus; that all remedies usually employed, such as aromatic etheric oils, dulcis. spir. nitr. castoreum, etc., were powerless, until at last, after repeated doses of clove, cinnamon, nutmeg and mace with chicken soup, it ceased.

Dr. F. L. MULLER.

MONROE, Mich., Dec. 1854.

ART. IV.—*Manual of Human Microscopical Anatomy*. A. KÖLLIKER, Professor of Anatomy and Physiology at Wurzburg. Translated by GEO. BUSK, F.R.S., and THOMAS HUXLEY, F.R.S.. Edited with notes and additions, by J. D A. CASTA, M.D. Illustrated by 313 engravings on wood.

Thus reads the title page of an 8vo of 800 pages, from the press of Lippincott, Grambo, & Co., of Philadelphia.

The author justly remarks that “medicine has reached a point at which microscopical anatomy appears to constitute its foundation, quite as much

as the anatomy of the organs and systems, when a profound study of physiology, and pathological anatomy is impossible, without an accurate acquaintance, also, with the most minute structural condition."

Animated by this conviction — a conviction daily extending and producing its legitimate result — he brings to the task his immense facilities and stores of knowledge, and in a concentrated form gives us this work, which, to a great majority of readers, will be more welcome than his more extended "*Microscopical Anatomy*."

If any guarantee of the excellence of a work bearing this great name, were needed, it could easily be found in the fact that it was translated into English and published by the Sydenham Society of London.

The science here treated is almost entirely the creation of the present century, and with the host of enthusiastic laborers in this fertile field, what may we not hope ere our successors shall chronicle its achievements as the century shall close?

After a few introductory remarks, in which the "literature" of the subject is briefly given — very much to the advantage of one who seeks to master the subject — he proceeds to "*The general anatomy of the tissues*."

In this we have an account of "*Cells*" — their constituents, development, both "free" and "endogenous," also multiplication by division.

These minute, but active agents, play a very important part in the organism, and their investigation throws great light on many obscure processes, which, till the microscope lent its aid, were an impenetrable mystery.

"*Tissues*," "*organs*," and "*systems*," are next discussed. Of simple tissues our author recognises, four 1. Epidermic; 2. Cartilaginous; 3. Elastic; 4. Connective tissues, which is the white fibrous tissue of other authors.

"*Complex tissues*" include, 5. "*Osseous*;" 6. Smooth muscular tissue; 8. Nervous tissue; 9. Tissue of the blood, vascular glands, and 10. The tissue of true glands.

Having considered these at sufficient length, in a generally clear and satisfactory manner, he next proceeds to "*Special Histology*." The first subject claiming attention here is the skin.

Instead of admitting between the cuticle and corium the existence of a "*basement membrane*" of Todd and Bowman, or "*homogenous membrane*" of Krause, he believes that fully formed cells exist down to the

corium, and that the outer surface of the corium has been mistaken for a distinct structure.

He adds, "a separation from the corium of this narrow, and on its under surface, by no means distinctly limited membrane, ought not to be attempted, for although a distinct membrane in the embryo, it cannot be obtained as a special layer in the adult." Thus it will be seen, he nearly acknowledges all the other anatomists claim. He finds no distinction in the structure of the cells in the differently colored races, the only difference being a variable amount of dark colored granules.

The appendages of the skin — nails, hair, sweat and sebaceous glands, are examined at length, and illustrated by numerous cuts which greatly aid in the study of this interesting subject.

The striated muscular system is next passed in review, and the difficult points of this interesting subject discussed, and while differing from others in the exact structural arrangement of a part, he usually has reasons for his opinion, which if not always quite satisfactory, are commonly well stated, and afford light upon the abstruse point, while the student rises from the investigation enlightened, if not convinced.

Concerning the attachment of tendon to the extremity of muscular fibre, Kölliker remarks, "In man, I must positively deny that the tendinous fasciuli are ever connected merely with the sarcolemma.

Todd and Bowman, in their *Physiological Anatomy*, declare "the fibre ends by a perfect disc, and with the whole surface of this disc the tendon is connected and continuous. The sarcolemma ceases abruptly at the circumference of the terminal disc, and some small part of the tendinous material appears to be joined to it."

When the attachment is to skin or mucous membrane, these fibres terminate without the intervention of any tendinous material.

Between 75 and 80 pages of the book are devoted to the very satisfactory account of the osseous system, in which development receives careful attention.

The vascularity of bone, as shown by the elegant Haversian system is well represented, and one becomes deeply interested in studying this beautiful provision for continual changes and the repair of injury.

On the subject of lymphatics in bone, he says they "have been described by some older and more recent authors, but their existence is not the less doubtful, and I have in vain endeavored to find such results."— From the elaborate examination given to the several questions relating to

bone, it would appear that the subject is well nigh exhausted, and the reader will find a great amount of valuable information in reference to bone.

The nervous system is examined with great care, and its 90 pages are well stored with plates and interesting detail of most careful and laborious research.

Those curious Pacinian bodies have been thoroughly investigated, and we learn that some 600 exist in the hand. Their use is a problem for some future laborer to develop. The reader will notice satisfactory replies to many of the questions which have perplexed him as he has reflected upon the subject of the nervous system, and sought to fathom its mysteries which time forbids us to allude to here, for we have already exceeded our intended limits.

The digestive organ next comes under review. The "mucous membrane of the oral cavity;" "tongue," "mucous glands," "follicular glands," and "salivary glands," receive careful attention with highly satisfactory results.

The next thirty pages are devoted to the "teeth," where will be found a rich reward for the labor of a careful perusal, where light is thrown upon those hidden, complicated and very interesting processes, resulting in those useful, beautiful and much abused organs, the teeth.

The digestive apparatus receives full consideration, which will be found very satisfactory.

Nearly 30 pages are occupied by the consideration of lungs, thyroid and thymus bodies, while 50 to 60 more are devoted to the vascular system and circulating fluids.

With the organs of special sense the work is brought to a close, except a brief appendix.

What our readers will especially prize, is a full index, for which the author has our hearty thanks, and will receive the thanks of those who are thus enabled to find promptly what they seek.

We have thus sought to give our readers such an account of this interesting work as will indicate how they may supply a deficiency, long felt to exist. Here is the result of careful study, by a competent observer, in a deeply interesting and important department of science, accessible to all, and many who shall purchase this work will be convinced that microscopic Anatomy is not that dry and useless study, which it has sometimes been represented. We heartily welcome "*Köliker's Microscopical Anatomy*" to our library.

ART. V.—Abstract of Meteorological Observations for Six Months of 1854,
kept at the University of Michigan by Prof. A. Winchell:

I. BAROMETER AND CLOUDINESS.

	Barometer reduced to 32°.				Barom. reduced to sea lev.				Cloudiness.			
	7 A.M.	2 P.M.	9 P.M.	Mean	7 A.M.	2 P.M.	9 P.M.	Mean	7 A.M.	2 P.M.	9 P.M.	Mean
	<i>in.</i>	<i>in.</i>	<i>in.</i>	<i>in.</i>	<i>in.</i>	<i>in.</i>	<i>in.</i>	<i>in.</i>	7 A.M.	2 P.M.	9 P.M.	Mean
JUNE	29.040	29.011	29.013	29.021	30.037	30.018	30.010	30.018	3.73	4.97	2.80	3.84
JULY	29.148	29.100	29.120	29.123	30.145	30.097	30.117	30.120	2.55	3.71	3.00	3.09
AUGUST	29.133	29.088	29.101	29.108	30.132	30.087	30.100	30.105	3.06	3.55	1.87	2.83
Summer Months	29.107	29.066	29.078	29.084	30.104	30.063	30.075	30.081	3.11	4.08	2.56	3.25
SEPTEMBER	29.157	29.083	29.130	29.123	30.158	30.084	30.131	30.124	4.57	4.03	2.30	3.63
OCTOBER	29.128	29.096	29.112	29.112	30.129	30.097	30.113	30.113	5.74	5.06	5.26	5.36
NOVEMBER	28.905	28.854	28.891	28.883	29.906	29.856	29.892	29.884	7.93	7.43	6.10	7.16
Autumn Months	29.063	29.011	29.044	29.039	30.064	30.012	30.045	30.045	6.08	5.84	4.55	5.38
Six Months	29.085	29.039	29.061	29.061	30.085	30.039	30.061	30.061	4.59	4.96	3.55	4.32

II. CLOUDS.

	N.		N.E.		E.		S.E.		S.		S.W.		W.		N.W.		0.	Mean velocity of all the clouds.
	No. obs.	Mean Veloc.	No. obs.	Mean Veloc.	No. obs.	Mean Veloc.	No. obs.	Mean Veloc.	No. obs.	Mean Veloc.	No. obs.	Mean Veloc.	No. obs.	Mean Veloc.	No. obs.	Mean Veloc.		
JUNE	4	1.00	2	2.50	2	2.50	0		3	1.30	20	1.43	19	1.36	15	1.83	15	1.25
JULY	1	1.00	0		2	1.00	1	1.00	1	3.00	26	1.27	21	1.68	10	1.30	30	1.40
AUGUST	0		3	1.33	0		0		4	1.00	4	1.25	19	1.26	11	1.64	43	1.34
Summer Months	5	1.00	5	1.91	4	1.75	1	1.00	8	1.77	50	1.32	59	1.43	36	1.59	88	1.33
SEPTEMBER	5	1.60	6	2.17	2	2.00	2	1.00	0		12	1.42	18	1.56	11	1.73	35	1.66
OCTOBER	1	2.00	0		2	1.00	1	1.74	3	2.00	13	1.46	26	1.73	14	2.43	23	1.81
NOVEMBER	4	2.00	2	1.00	0		0		2	2.00	11	2.00	37	2.51	25	2.50	9	2.21
Autumn Months	10	1.87	8	1.58	4	1.50	13	1.37	5	2.00	36	1.63	81	1.93	50	2.22	67	1.89
Six Months	15	1.43	13	1.74	8	1.62	14	1.12	13	1.88	86	1.47	140	1.68	86	1.90	155	1.61

III. WINDS.

	N.		N.E.		E.		S.E.		S.		S.W.		W.		N.W.		0.	Resultant motion of the air.
	No. obs.	Mean Force	No. obs.	Mean Force	No. obs.	Mean Force	No. obs.	Mean Force	No. obs.	Mean Force	No. obs.	Mean Force	No. obs.	Mean Force	No. obs.	Mean Force		
JUNE	5	1.80	2	2.00	10	1.80	3	2.33	8	1.25	19	1.84	15	1.53	9	1.67	19	1.34
JULY	5	1.60	7	1.14	7	1.00	14	1.29	12	1.42	23	1.70	7	2.29	10	1.20	8	1.38
AUGUST	4	1.25	8	1.37	2	1.50	4	1.25	4	1.25	32	1.34	10	1.60	18	1.67	11	1.26
Summer Months	14	1.55	17	1.50	19	1.43	21	1.62	24	1.31	74	1.63	32	1.81	37	1.51	38	1.33
SEPTEMBER	6	2.67	10	1.90	8	1.87	5	1.20	0		33	1.67	3	3.00	3	3.00	22	1.40
OCTOBER	1	2.00	2	1.00	1	2.00	10	1.50	14	1.14	24	1.62	12	2.58	9	2.67	20	1.41
NOVEMBER	3	2.17	2	2.00	0		6	1.00	9	2.22	33	2.55	16	2.62	15	2.27	6	2.18
Autumn Months	10	2.23	14	1.63	9	1.29	21	1.23	23	1.12	90	1.95	31	2.73	27	2.65	48	1.66
Six Months	24	1.91	31	1.56	28	1.36	42	1.42	47	1.21	164	1.79	63	2.27	64	2.08	86	1.49

IV. EXTREMES.

Barometer reduced to 32°.

Maxima.											
						Minima.					
	June.	July.	Aug.	Summer Months.	Sept.	Oct.	Nov.	Autumn Months.	Dec.	Jan.	Feb.
7 A.M.	29,268	29,343	29,334	29,343	29,547	29,513	29,538	29,547	28,681	28,844	28,976
2 P.M.	29,364	29,305	29,272	29,364	29,464	29,495	29,562	29,562	28,714	28,840	28,962
9 P.M.	29,349	29,294	29,245	29,349	29,433	29,466	29,544	29,544	28,640	28,961	28,950
ENTIRE DAY.	29,364	29,343	29,334	29,364	29,464	29,513	29,562	29,562	28,640	28,840	28,950
									28,640	28,820	28,820
									28,252	28,024	28,024

Above are the general results of tri-daily observations, for the summer and autumn months.

The latitude of the University of Michigan is about 42 deg. 16 min. North, and longitude 83 deg. 44 min. West. The elevation of the barometer above the level of the sea, was, till August 16th, 868 feet; and since then, 891 feet. The former elevation renders necessary a plus correction of .997 inch — the latter a plus correction of 1.001 inch.

Table I. gives the monthly means of barometric observations for three hours of the day — calculated, after the reduction of each separate observation, to the temperature of 32 deg. Fah. It gives, also, the same means after their reduction to the level of the sea. The amount of cloudiness, in the same table, was recorded in a scale of 10 for entire cloudiness. The means given were obtained by dividing the sum of all the numbers, thus obtained, by the whole number of observations in the period for which the mean is calculated.

Table II. exhibits the number of observations at which no clouds were visible, and the number at which the clouds were found moving from each of the 8 principal points of the compass, as well as the mean velocities of the clouds from those points respectively, and from all points.

Table III. contains the results of similar observations for the winds on a scale of 1 to 10. The means for the several points of the compass were found by dividing the sum of all the observations by the whole number of observations of winds from those points respectively; but the mean for the month was found by dividing the sum of all the observations for the month by the total number of observations, including those made at periods of a perfect calm. This gives the resultant motion of the air.

It will be seen from Table IV. that the entire range of the barometer for the summer months, was only .684 inch, while for the autumn months it amounted to 1.538 inch, and that both the autumn extremes occurred in November. The barometric mean of this month was .178 inch. below the mean of the six months reported.

Regular observations have not, heretofore, been made on the external thermometer, nor the humidity of the air. Accurate thermometrical and psychrometrical observations will, however, be reported hereafter, as well as exact measurements of rain and snow.

ART. VI.—*A Systematic Treatise. Historical, Etiological, and Practical, of the Principal Diseases of the Interior Valley of North America, as they appear in the Caucasian, African, Indian and Esquimaux varieties of its Population.* By DANIEL DRAKE, M. D. Edited by S. HANBURG SMITH, M. D. &c., &c., and FRANCIS S. SMITH M. D., &c., &c. Second Series, pages 925, 8mo. LIPPINCOTT, GRAMBO & Co., publishers. Philadelphia, 1854.

The first series of this great American work was published in 1850, during the lifetime of its distinguished author, and was prepared for the press by the writer's own hands, and contained 702 pages, 8mo.

The first book was principally devoted to the consideration of the Topographical and Hydrographical etiology of the great interior valley; its geological outlines, hydrographical basins, &c., including the special medical topography of numerous localities on the Gulf of Mexico, in and around the Delta of the Mississippi, the river and valley along the Delta the Ohio basin, the basin of the great lakes and the basin of the St. Lawrence.

Part II. of book first, is devoted to Climate Etiology. This is treated, of under the heads of Nature, Dynamics and Elements of Climate, Temperature of the Interior Valley; Atmospheric Pressure of the Interior Valley; Winds of the Interior Valley; Aqueous Meteors; Electrical Phenomena; Distribution of Plants and Animals.

Part III.—Book first is devoted to the consideration of Physiological and Social Etiology. This is treated of under the heads of Population, viz: the different varieties; their physiological characteristics, &c.; Modes of living, clothing, lodging, bathing, habitations and shade trees; occupations, pursuits, exercises, and recreations.

Here is a rich table of Contents, and the able and original views which the author has advanced, in treating of these important topics, gives him a rank with the very first medical philosophers of this or any other age.

The genius and great ability displayed in the first book, gave us a keen appetite, and great anxiety to obtain the book II., which is now upon our table, and which, (as we were promised,) treats of practical subjects.

Part I., is a systematic treatise on Autumnal or Periodic Fevers. The consideration of this subject occupies 183 closely printed octavo pages, and is considered in all its bearings, and is handled in an original and a

masterly manner, and in this part alone cost the price of the whole work. No student of medicine, or practitioner, in the Interior Valley of North America, could afford to do without it.

Part II. is a systematic treatise on Yellow Fever.

Part III. Treats of Typhoid Fever.

Part IV. Eruptive Fevers.

Part V. Phlogistic Fevers: The Phlegmasiæ.

This great work is mainly the result of the author's own investigation observation and experience. After many years occupied in successful and extensive practice and teaching, he devoted several years to travelling and collecting from personal inspection the materials which have been used in the construction of this great work. Scarcely a city, town, village or neighborhood in this great Interior Valley but he visited, inspected, and from which he culled matter for his future use. There is hardly a physician of ten years practice in this vast region but remembers his visit and his prying but pertinent questions. Hence it will be seen that a great *desideratum* in our profession has been obtained, and no other book can supply its place.

We predict a wide sale for the work, and more especially, for the second book, or the one now before us, and we think we hazard nothing in giving it as our opinion, that it will be considered authoritative for many years to come, on any of the numerous subjects of which it treats.

D.

ART. VII.—*On Fibrin: The larger portion of a dissertation, read in the regular course of exercises in the Medical Department of the University of Michigan.* By G. E. CORBIN, Member of the Class.

[We give place to the following article, not so much on account of any information it may communicate to those of the profession who may have made the obscure subject of fibrin a special study, as to present a specimen of the bi-weekly exercises in composition on medical subjects required of those who are applicants for the honors of the institution. The subject was continued, and the following constituted the material of three or four exercises.—*Eds. Pen. Jour.*]

Being *practically* unacquainted with the chemical, physiological, and pathological attributes of fibrin, we propose simply to investigate, or

compare, the more obvious and generally received opinions with regard to it.

Fibrin constitutes a very important part of the blood, and the basis of the muscles. It is a white, inodorous, insipid solid; and may be procured from recently drawn blood, during the act of coagulation; by stirring with a rough stick, and washing to whiteness the adhering shreds. It may be dissolved to a very limited extent in boiling water, but is entirely insoluble in water at ordinary temperatures.

Potassa dissolves it, but it is readily precipitated by various acids. With regard to the precise chemical formula for fibrin, there is, as with all other animal compounds, more or less room for doubt.

The following formula, designed to represent the number of equivalents of each of the integrant particles of fibrin, is that given by Kane and others; viz.: $C_{800} H_{620} N_{100} O_{240} PS_2$. That given by Mulder is the same, with the exception of an additional equivalent of phosphorous. In "William's Pathology and Therapeutics," we frequently find the term *fibrin* and *dentoxide* of *protein* used synonymously. If we convert the generally acknowledged formula for protein, into one representing the dentoxide, we shall have a formula differing more from either of the above, than they do from each other, it being entirely destitute of the symbols for phosphorous and sulphur, and augmented by two additional equivalents of O. The theory of fibrin, being merely an increased oxydation of portein, whether *hypothetically*, or *indubitably established*, is certainly beautifully ingenious in itself, and if true, of inestimable value in the explanation of many of the complex phenomena of inflammation. It is our impression however, that the term dentoxide of protein refers more particularly to the colorless corpuscles of the fibrinous mass, inasmuch as they are described as being formed by the consolidation of dentoxide of portein around the minute oleaginous molecules, (as nucleoi,) which are always present in the blood.

Chemically, fibrin differs but little from albumen; whereas, the *physiological* distinction is very obvious. It consists in the fact that fibrin coagulates spontaneously, and in so doing assumes a definite, interlaced, fibrous arrangement.

Albumen, on the contrary, requires the aid of heat, alcohol or acids for coagulation; and then coagulates in a granular amorphous mass. Liebig* asserts that, chemically, fibrin and albumen are identical.

* Liebig has more recently changed his views and come to the conclusion that fibrin holds an intermediate position between albumen and gelatine.

* The generally received opinion with regard to the *utility* of fibrin is, that it, together with the serum of the blood, constitutes the *plasma*, the *coagulable lymph*, the *creative* or *formative* material by which the various textures of the body are nourished, and *from* which, (in cases of organic lesion) new ones are formed. It appears to me that there are many strong arguments both in favor of and opposed to this theory; some of which we will now proceed to consider. In favor of the theory we may mention the following facts:

1st. Williams asserts that fibrin "exists in larger proportion and in higher perfection in arterial, than in venous blood."

2dly. That it is "more abundant during advancing growth in well fed persons, with active circulation; and less so in early infancy, and in persons of weakly constitution and advanced age."

3dly. Another weighty argument in favor of the nutritive or reparative properties of fibrin, is to be observed in its power of forming false *membranes*, *cicatrices*, &c. When effused under favorable circumstances, fibrin becomes speedily organized, and well supplied with blood-vessels. And in fact its organization, and vascular tendency may be distinctly observed in clots of blood external to the body. This not unfrequently is the *sole* process by which wounds and ulcers are healed.

The effusion and organization of plastic lymph, or fibrin, upon the sides or surfaces of wounds, unite or bind them together by that process demonstrated by surgeons "*union by first intention*." With regard to the healing of ulcers, Williams makes use of the following language, viz: "Ulcers may heal by the effusion of *fibrin* on their walls, and the extension of vessels into this lymph in the form of granulations, which are the materials of the new texture."

4thly. The fact that the proportion of fibrin in the blood is found to be increased during pregnancy,—is sometimes advanced as an argument in favor of its nutritive properties.

5thly. Williams asserts in paragraph 550 of his Pathology, that "a wound with pale flabby edges, in a depressed state of the system will not heal until some degree of inflammation has commenced."

And in connection he plainly implies that the inflammation is necessary in order to *manufacture fibrin* or *plasma*.

With regard to the merits of the *first* arguments in favor of the nutritive properties of fibrin, viz: that the arterial fibrin surpasses the venous in both *quantity* and *quality*, we have no proper data upon which to base an unbiased opinion. We recollect, however, of carefully examin-

ing the clots formed upon equal quantities of blood, taken respectively from the external jugular vein and artery of a quadruped. And in this particular instance, the venous clot was considerably larger, and somewhat firmer than the arterial. But inasmuch as the *red corpuscles* were not separated, we can advance no *positive* opinion with regard to the absolute amount of fibrin contained in either. If fibrin *does* exist in greater perfection and abundance, in arterial than in venous blood, it would at *first*, appear to be a *very strong argument* in favor of its nutritive properties; but yet not *conclusive*. For it should be remembered that in the process of the elimination of excrementitious matters from the system; the arterial radicles of the excreting organs, usually take an equal part with the venous. Fibrin while in the circulation is fluid; and from the arterial portion of the corpora Malpighina, the liquid part of the urine is described as being excreted; while the venous capillaries interlacing with the tubuli uriniferi, perform the office of excreting the *solid* parts. Strong objections may be taken to this ground on the fact that fibrin is *never* found in the urine. Admitting the fact,—we would simply state that this does not alter the truth of arterial excretion,—and ask whether it is more hypothetical to suppose that fibrin is *chemically* or *vitaly*, decomposed and excreted in other forms, than it is to suppose that the debris of the tissues generally undergoes a transformation previously to its excretion? But since we propose to discuss both sides of the question, and inasmuch as by *far* the greater portion of arguments with regard to this matter,—either *pro* or *con*.—appear to be merely hypothetical assertions; we may not be wholly *unpardonable* for advancing another. So *thoroughly* established, and *universally* acknowledged is the fact,—that the process of the destructive disintegration of the tissues occurs *principally* through the instrumentality of *oxydation*; that Liebig maintains that the *only* beneficial influence arising from the ingestion of *carbonaceous* alimentary substances; is simply that of protecting the various organs of the body from combustion, during the generation of animal heat, by the process of respiration. Again, let us distinctly bear in mind that the proper function of the Liver is the secretion of bile; and that this secretion has a twofold object, pertaining to each of the two processes of *digestion*, and the purification of the blood. Now these being undisputed *facts*, we may, (reasoning from analogy) conclude that the superabundance of fibrin (if excrementitious) in the arterial blood; is owing to the superior facilities to which it has been subjected, for the

oxydation of any of its *own* worn out ingredients; or that of any other effete matters which it may contain. The object of this, (like the secretion of bile) may be considered to be twofold; 1st the *decomposition*, or the *separation* of effete matters from the other ingredients of the tissues; And *secondly*, the transfer of oxygen from the lungs to all portions of the organism; as it is the case also with the red corpuseles. Now, with regard to the comparative amount of excrementitious matters contained in the arterial and venous blood, we must bear in mind that in the *aggregate*, there is *very much* less in the former than in the latter; but from our present position, there is more of one particular kind—*fibrin*—in the arterial than the venous. Excrementitious substances not exhalable must be excreted through other emunctories than the lungs; and some of these, as for example the fluid portions of the urine (before alluded to,) are excreted directly from the arterial radicals themselves. These (for the present) are the most weighty arguments that we can adduce on this side of the question. And if it be a fact that the arterial fibrin does surpass the venous in both quantity and quality, we hesitate not in asserting that such an evidence of its nutritive properties must forever remain unshaken by all such doubtful hypothesis. With regard to the second argument in favor of the nutritive theory of fibrin,—viz: that “it is more abundant during advancing growth in well fed persons with active circulation; and the contrary,”—we have no hesitation in asserting that it proves nothing. Or rather, that it proves the one theory just as much as the other. If we assume the nutritive theory to be true, we can account for the augmented amount of fibrin in the blood,—on the ground that it is more abundantly elaborated in order to supply the proper amount of nutritive material, both for the increasing growth, and the reparation of the tissues; which are undergoing a more rapid metamorphosis, in consequence of the increased activity of the circulation. But, on the contrary, if we assume fibrin to be simply the *debris*, the explanation is equally easy. The more active the circulation, and vigorous the other functions, the greater will be the metamorphosis, and consequently the amount of debris. And “vice versa.”

Having briefly noticed and commented upon such a portion of the various arguments in *favor* of the nutritive theory of fibrin, as we deem most important, we will now proceed to consider some of the most weighty arguments in favor of the theory which considers fibrin simply as the *debris*. In paragraph 182 of William's Pathology, he asserts that

“Prevorst & Dumas found that animals bled almost to death, could be restored by injecting into their veins a mixture of red particles and serum, even when the fibrin had been removed; yet the serum alone failed to produce any such effect.” And further that “Andral, Gaverret, and Delafond remarked that, in domestic animals, the vigor and beauty, of the animal were proportioned more to the amount of red particles in the blood of the animal than to any other constituent; and that the improvement of a breed by crossing was marked by an increased proportion of this element,” and also by a corresponding *diminution* of the amount of *fibrin* in the blood.

It would appear from the above facts that fibrin is not absolutely essential for the maintainance of the various vital and organic functions; otherwise they would not be so readily aroused by the injection of a fluid *entirely destitute of it*.

Had there been a careful comparison instituted between the effects produced in this experiment, and those produced by the transfusion of an equal quantity of healthy venous blood,—it would seem that the conclusion to be drawn would have been more obvious. This however is quite doubtful. For inasmuch as the *process* by which the fibrin is separated from the red corpuscles, must necessarily diminish the *vitality* of the latter,—it is somewhat difficult to say whether the red corpuscles *thus deteriorated*, would not have as *great*, and perhaps a *greater immediate* effect in retarding the process by which the restoration of the declining functions is produced, than the *fibrin* of the blood would, even on the supposition that it is entirely excrementitious. The *second* fact which we propose to mention in confirmation of this theory is, “that there is little or no fibrin in the blood of the foetus, none in the egg, none in the chyme, and less in the blood of the carnivora (who feed on it) than in that of the herbivora.”

If with the first of the preceding facts, we combine a fact contained in a statement made by Williams (on the authority of Denis) in which he asserts, that the amount of red blood corpuscles in the *fatal* circulation, exceeds that in the *maternal*, in the ratio of 222 to 140;—we shall have made a no very *trivial* advance in the establishment of the theory at present under consideration. If we mistake not the growth during intra-uterine life is much more rapid than at any other period of existence. And according to the theory at present under contemplation, we have *just* the state of *affairs* requisite to produce such an effect; an

augmented amount of red blood corpuscles, and a diminished amount of fibrin in the circulation. Strong objections may be taken to *this* view of the subject, by the *opponents* of the theory,—on the ground that the greater the activity of any function whatever, the greater will be the metamorphosis, and consequently the amount of *debris*; and applying the same mode of reasoning to this particular instance they would contend that if fibrin is simply the *debris*, it ought to be found in very great abundance in the foetal circulation. But the *fallacy* of this argument will readily be perceived, when we consider that as the *necessary cause* of so rapid a development, much the greater portion of the nutritive material must be *assimilated*, and but a very small portion of the tissues *disorganized*. The metamorphosis of the tissues being therefore very much restricted, the amount of *debris* must necessarily be small.

Again, in the example of the egg, we have an illustration of a very rapid growth without the direct assistance of any fibrin whatever. The mere fact of the very rapid development of the foetus in utero,—with a circulation abounding in red corpuscles, and deficient in fibrin,—is of itself, a weighty argument in favor of the theory which considers fibrin to be non-nutritious. Yet very much is detracted from the weight of this argument, by the fact that there is no direct communication between the maternal and foetal vessels; the *liquor sanguinis*, or *fibrinous* portion of the blood, being the only part that is capable of becoming absorbed, and thereby contributing to the nutrition of the foetus. The same fact is perhaps more forcibly illustrated by the rapid development of the foetus, in cases where it is entirely disconnected from the maternal system by the entire absence of both cord and placenta. In these cases, the foetus must be nourished by the absorption of the fluid secreted by the mucous coat of the uterus.

But whether there be or be not a placenta, it is possible, for the fibrin of the liquor sanguinis to be rejected in consequence of some power of choosing or selecting. This however, is purely hypothetical, and consequently entitled to but very little weight.

In the next place,—we would quote a few statements made by Dr. Simon in confirmation of the theory that fibrin is the debris of worn out tissues, and not a nutritive material. He says, “fibrin is undiminished by bleeding, however frequently repeated; nay, it is often, or even usually increased under this debilitating treatment.” He further says,—“I find that under many other circumstances of exhaustion and weakness and

in anæmia, during the progress of starvation, during diseases essentially anæmic, during violent fatigue, and the like, its proportion has been found at least as high, perhaps higher, than in the inflammatory process." Now in the consideration of the merits of the first assertion contained in the quotation, we must acknowledge it to be a plainly obvious and undisputed fact, that in consequence of any profuse and long continued discharge, (either *sanguineous* or not) there is unavoidably a state of general atony, and extreme prostration produced. Healthy and well aerated blood, contains all of the ingredients, combined in the exact proportion, requisite for the proper development and nourishment of each, and all of the various tissues and organs constituting the entire body. This admitted, it is plain that any unnatural loss or expenditure of this fluid, is virtually the same, (in one of its effects) as withholding all nutritious substances; or in other words, starvation. Another very important effect of profuse bleeding, is a distinct shock, to the nervous system; a diminution of nervous force, and vital action, which undoubtedly has much to do with retarding, or preventing, the process of assimilation. Now, it is exceedingly difficult, if not absolutely impossible, to account for the augmented amount of fibrin in the blood in cases of "starvation" and in "diseases essentially anæmic"—upon any other hypothesis than that which considers fibrin simply the *debris*. If fibrin is a nutritious material, it certainly ought, instead of accumulating, to be very closely expended in nourishing the textures,—in cases where the nutriment usually supplied by the aliment—is entirely withheld. So too with regard to the *anæmic* condition, in which the blood is almost invariably deficient either in the quantity or quality of the *red corpuscles*, the fibrin ought to be rapidly expended. The truth of the matter however, would appear to be, that since the process of nutrition must necessarily cease in cases of starvation, it follows that the amount of fibrin (if the *debris*) must as necessarily increase, in consequence of the continued metamorphosis, or destructive disintegration of the tissues, and removal by the absorbent system. That the destructive disintegration of the tissues does continue subsequently to the cessation of the nutritive process, is indisputably proved by the fact that the emaciation is a constant, and well marked symptom of starvation, which could not possibly be the case, were both processes to cease at the same time. The same remarks will apply equally well as an explanation of the phenomena alluded to in *anæmia*, from whatsoever cause it may originate.

We find that the last clause of our quotation from Simon is directly contradicted in the 196th paragraph of William's Pathology; where he asserts that "excessive bodily fatigue more or less expends the fibrin: hence the blood often remains fluid in animals hunted to death." Abstractly considered, that is, unless some other influence besides the fatigue is brought to bear,—both these statements cannot be true. It is somewhat remarkable that each author here quoted has made a statement most easily explained upon the particular theory adopted by himself. It would appear then to be doing injustice to no one, to surmise that either the one or the other, in consequence of having previously formed an opinion with regard to the matter, conducted a hasty, or at least an unsatisfactory analysis. But, by varying the conditions under which the fatiguing exercise is instituted; we can quite satisfactorily account for the two opposing results upon either theory. For the sake of illustration we will suppose two individuals placed under exactly the same circumstances; with the single exception, that one is much invigorated by the proper digestion of a substantial meal; (which by the way should be rich in the elements of respiration) whereas the other is in a half famished condition. Now if these two individuals are subjected to the same amount of labor, we contend (upon the nutrition theory) that the augmented amount of fibrin found in the blood of the one, is owing to its increased elaboration from the nutriment taken, in order to counteract the increased destruction of the tissues under the particular circumstances. And in the case of the other, the greater portion of what little fibrin there was, is expended in nourishing the tissues; inasmuch as there is no nutriment in the system from which to elaborate more. Upon the other theory however, we would account for the diminished amount of fibrin in the blood of the starving individual, by supposing that it is decomposed, in order that its carbon and hydrogen may become oxydized in the lungs,—and thereby afford fuel for the process of respiration. To account for the augmented amount in the well-nourished individual, we have but to consider that, in consequence of the more rapid change going on in the system, fibrin is produced in greater abundance; and inasmuch as the non-azotised ingredients of the aliment are abundantly sufficient for the purposes of respiration, it is not necessarily (for this purpose at least) disorganized.

"Having now adduced and commented upon the most important arguments weighing upon this side of the question; we will next proceed in

as brief a manner as possible, to take a cursory review of those various arguments; or rather to bring such a portion of them as are not equally well explained on the principles of either theory; in direct contrast with each other. These being done, it would seem that we might at once deduce positive and satisfactory conclusions therefrom, were it not for one fact; viz:—that some of these arguments, themselves, appear to be merely hypothetical assertions; the truth of which are at any rate, mooted points. A good illustration of this fact has already been cited in the contradictory statements made by Simon and Williams with regard to the increased or diminished amount of fibrin in the blood, in cases of “excessive bodily fatigue.” It will be recollected, however that in this particular instance, the dilemma was readily solved by varying the circumstances under which the fatiguing exercise was instituted.

Now with regard to the various arguments adduced in favor of the nutritive theory of fibrin,—we think from what has already been said, that with the single exception of the first, they are all capable of being explained equally well upon the other. The one, then,—viz: that *fibrin “exists in larger proportion and higher perfection in arterial than in venous blood,”* must be thrown into the balance as the sole weight upon the one side of the question. Not that there could not have been more arguments adduced—but as the only remaining one, of the number selected; which were and still are believed to include the most weighty. Next, with regard to the arguments adduced upon the other side of the question. The first one is,—that “animal bled almost to death can be restored” simply “by injecting into their veins a mixture of red particles and serum.”

The same result it is true, might be produced by the injection of various other stimulating solutions. Yet, the above fact, taken in connection with the fact that there is no fibrin found in the egg; must conclusively establish the fact that fibrin is not absolutely essential for perfect, or in fact even rapid organization and growth. With regard to the facts “that there is little or no fibrin in the blood of the foetus, none in the chyme, and less in the blood of the carnivora (who feed on it) than in that of the herbivora”—(which have already been treated of at some length—) we think that by a nice discrimination they might be made to weigh to some extent upon this side of the question. Yet, since there is so much of hypothesis, and so little of absolute certainty

connected therewith, we deem it proper in this summary to pass them by. We next have to do with the statements made by Simon. These are not hypothetical; but are said to depend upon the results of careful chemical analysis. If it be true that excessive *bleeding, starvation, and anæmia*, materially augment the amount of fibrin in the blood; these facts must certainly weigh very heavily upon that side of the balance indicating debris. On the whole then, it would seem that from the limited amount of arguments we have had time to bring forward, the most weighty are upon this side. It would however, be very unsatisfactory—if indeed not really presumptuous, to attempt to establish any positive conclusion with regard to the matter, from the limited amount of—and controverted statements here collected. Much time and labor are yet requisite, for a satisfactory decision on the subject.

As for example, the experiments and analysis of Simon, should be repeated; and their truth or falsity verified. The exact ratio, existing between the amounts of fibrin contained in venous and arterial blood, should likewise be established beyond controversy. The precise changes and exact nature of foetal nutrition, should also be thoroughly understood; besides numerous other facts bearing upon the question, needless to mention.

SELECTIONS.

From the New York Journal of Medicine.

Operations on the Rectum and Anus for Malformations, Laceration of the Sphincter, Hypertrophy of the Sphincter from Spasmodic Action, Constriction, and Ulceration of the Rectum and Colon. By W. PARKER, M.D., Professor of Surgery in the College of Physicians and Surgeons, New York.

(Concluded from page 268).

Remarks.—Rupture of the perineum has been justly considered one of the most serious accidents of parturition, so difficult have these wounds proved of cure. It has, indeed, been advised to leave them wholly unto nature; as not susceptible of treatment. The success of the operation in the preceding case, one of the most formidable that can occur, demonstrates the fallacy of such an opinion. These lacerations of the perineum may vary from a simple rupture of the fourchette to a complete division of the vulvo-anal septum, involving the sphincter ani. This latter is far the most serious, as presenting the greatest obstacles to cure.

Two principal methods of cure have been proposed. The first is, to effect a re-union by rest and cleanliness, without the resort to surgical means, and also the second to promote union by surgical interference. Surgical and obstetrical writers seem to be about equally divided in the adoption of these methods. Among the French, Boyer and Duparcque favor the former, and Dubois and Roux the latter. Mr. Brown, in his recent work,* concludes in regard to the opinions of English writers: "On the whole, the prevalent opinion in England appears to have been that, from the uncertain, and, most frequently, unsuccessful, results of the operations devised, and from the apparently insuperable difficulties to be contended with, it was better merely to aid the efforts of nature in narrowing the wound, and in lessening the evils attendant on it." The method of treatment by rest and cleanliness is generally all that is required when the laceration is slight, and it is adopted immediately after the accident has occurred. But in those severe cases, when from the use of the forceps, or mismanaged labor, the rent extends completely through the sphincter ani, the suture offers the only reliable means of cure.

* "On Some of the Diseases of Women admitting of Surgical Treatment." By Isaac Barker Brown, F.R.C.S., Surgeon-Accoucheur to St. Mary's Hospital, etc., London: Churchill, 1854.

The different forms of suture used have been, the interrupted, the twisted, and the quilled, and of these the latter is generally preferred. Mr. Higginbotham reports a case in the *Lancet*, vol. 2, 1849, in which the laceration extended through the sphincter ani; he used the interrupted suture in two places, and applied the nitrate of silver to the skin along the edge of the wound. "The wound united by the first intention; the eschar surrounding the laceration, made by the caustic, had the power of fixing the parts as if adhesive plaster had been applied." The operation was performed thirteen years before the date of the report, and during that time the patient had remained well, and borne nine children without any return of her trouble. Several cases have been reported cured with the hare-lip pins and twisted suture, but the quilled suture is much more frequently used at present than any other, and is decidedly preferable to those mentioned. In repeating this operation, however, I should prefer to use the clamp suture of Dr. Sims, of this city, which I believe would be admirably adapted to these cases, and for the introduction of which into surgical practice he is deserving of great credit.

There was one step in this operation to which I would call particular attention, as contributing not a little to its success, viz., the complete division of the sphincter ani upon each side of the coccyx. By this simple measure, the tension was entirely taken from the posterior lips of the wound, which had previously been widely separated and drawn outward and backward, and the edges were in consequence readily approximated and easily retained in apposition. The necessity of this step to overcome the principal obstacle to the retention of the opposed surfaces in easy apposition, was impressed upon my mind while contemplating the appearance and anatomy of the parts engaged. The sphincter ani muscle having a strong and unyielding attachment to the coccyx, acted powerfully and constantly in separating its anterior lacerated portion, and, of course, in drawing asunder the rent in the perineum. The remedy for this difficulty very naturally suggested itself. By dividing the coccygeal attachments of this muscle its action would be destroyed and its power to prevent the perfect and undisturbed contact of the wound would be neutralized. The result of its division justified this conclusion, for not the slightest difficulty occurred in accomplishing this hitherto formidable task, and obtaining union throughout by the first intention. To relieve the strain upon the sutures, where the perineum is rigid and tense, Diffenbach made elliptical incisions upon each side of the median line; and recently, Mr. Hilton, of London, has, by subcutaneous incision, divided the coccygeal attachments of the sphincter and levatores ani muscles, for the purpose of changing the direction of their action from the coccyx towards the pubes.

At the time the above operation was performed in 1849, I was not aware that the division of the sphincter had ever been recommended, much less practised in these cases. It appears, however, according to Mr. Brown, that Saucerotte once operated in a similar manner, and Mr. Erichsen states (*Science and Art of Surgery*) that it was advised by Copeland, and approved by Bransby Cooper. Within the last year or

two, Mr. Brown, of London, has operated in this manner very successfully, and in his work, above referred to, the different steps of the operation are finely and accurately illustrated by engravings. He is a warm advocate of the operation thus modified, and reports eighteen cases thus successfully treated.

It will be observed that my operation was by subcutaneous incision while that performed by Mr. Brown involves the external, as well as internal parts. In regard to the subcutaneous incision, he remarks [Page 41] "A subcutaneous incision of the sphincter has been suggested, but it will not furnish the results aimed at. The muscular fibres of the sphincter must be completely severed, and also the investing integument, to annihilate all traction." This objection is without foundation, as the puckered, folded integument of the anus, when once the sphincter is divided, is capable of indefinite extension, and exerts not the slightest traction upon the flaps of the wound. As to the results which subcutaneous incision furnish, we need but refer to the above case to prove that they are satisfactory.

CASE 11.—*Hypertrophy of the Sphincter Ani—Obstinate Constipation from its Spasmodic Action—Relieved by free Division.*

Mrs. C., an intellectual lady, aged 26, of a highly nervous temperament, and also imaginative, married about four years, but never pregnant, came under observation in 1852. She had been a sufferer from her childhood, from a peculiar form of constipation, or rather a retention of the contents of the bowels from a peculiar cause. It seems that when about six years old she passed from her bowels some lumbricoides, the appearance of which, or the sensation which they produced, made a strong impression upon her mind. It happened subsequently that her imagination controlled the action of her bowels by inducing spasmodic action of the sphincter ani. She became so morbidly sensitive whenever her bowels were about to move, that under the impression that worms were about to pass from her, the sphincter would close firmly and entirely prevent the passage of feces. In this manner a whole month often passed with repeated, but vain efforts to procure a dejection from the bowels. At every attempt, no sooner would she arrange herself for defecation, than the approach of the feces to the rectum would induce a spasmodic and uncontrollable action of the sphincter and render all her efforts abortive. This state of things had continued for years, and was very perceptibly impairing her health. An actual movement of the bowels could be obtained only by the aid of active cathartics and it was then attended by the most intense suffering. She had resorted to various remedies, change of diet, etc., but with no benefit.

On examination, no disease of the anus or rectum, as fissures or ulcerations, could be detected on the most careful exploration; the only abnormal appearance was an enlargement of the sphincter muscle, which was in a truly hypertrophied condition, being markedly increased in bulk and strength. I directed her to restrict her diet to laxative food, such as rye, mush, wheaten grits, raw oysters, etc., and prescribed aperient medicines,

and belladonna ointment to be applied to the anus. These measures, however, had no special or permanent benefit.

I then proposed the operation of dividing the sphincter muscle, which was submitted to, after a little hesitation. She was brought under the influence of an anæsthetic and the sphincter was divided freely upon both sides. Her nervous system was considerably excited by the anæsthetic, but she recovered from the operation with no unfavorable symptoms. The result of the operation was very satisfactory, as the morbid sensibility was almost entirely relieved, and the evacuation of the bowels rendered comparatively easy. She was seen recently and remarked that the operation had benefited her very much.

Remarks.—Spasmodic contraction of the sphincter ani is generally associated with, and dependent upon, ulcer or fissure of the anus. It may, however, exist independently of such causes, and is then dependent upon some other source of irritation, or upon a hysterical condition of system.

The preceding case is closely allied to the latter, though differing sufficiently to form a separate class of cases. The loss of consent and sympathy between the different muscles necessary to the expulsion of the fæces was, due to a purely mental cause, and not to a morbidly sensitive condition of the reflex spinal system. In the early history of the case, the action of the diaphragm and abdominal muscles was normal, the passage of the fæces along the bowel to the rectum produced no spasmodic action of the sphincter muscle, but when the expulsive act was about to be completed, the imagination became strongly excited, and the sphincter was closed involuntarily. This act was repeated from time to time, and finally became a fixed habit. The sphincter, in the meantime, by its unwonted action and powerful contraction, to resist the force of the abdominal muscles in effecting an evacuation of the contents of the bowels, of necessity gradually acquired bulk and strength, as in the case of any other muscle impelled to unusual exertion. Its action at length became purely spasmodic, being excited by the passage of fæces along the rectum, and the act of defecation could not be completed unless the intestines and abdominal muscles were stimulated to unwonted action by powerful cathartic medicines.

Spasmodic contraction of the sphincter ani, independently of any local disease, has been described by Boyer, Dupuytren, Mr. Brodie, and others. The former seems to have been the first to describe the disease and point out the proper method of treatment by division of the sphincter. In an article in the *Journal Complementary*, t. 2, p. 24, *On some Diseases of the Anus*, he relates three cases which he treated in this manner with success. Dr. Bushe, of this city, in his work on the *Diseases of the Rectum and Anis*, also describes a form of spasmodic contraction of the sphincter, in which no local disease is discoverable, and which admits the passage of the finger without pain. Mr. Brodie speaks of it as a disease of not very uncommon occurrence, and remarks that "it is met with chiefly in women, especially those who are disposed to hysteria. It is,

however, met with in other women, and sometimes in the male sex."—(*London Med. Gaz.*, vol. 16, p. 26.)

Mr. Quain, however, in his recent work,* denies that spasmodic contraction of the sphincter ani ever occurs as an idiopathic disease, and states, that after an attentive examination of the cases reported as such by Boyer, he does not find any which confirms the opinion held by this surgeon. He regards them all as "examples, not of an idiopathic affection of the sphincters, but of disease of the mucous membrane, with sympathetic spasm of those muscles." It is true, as he remarks, that it is often very difficult to find the local ailment, and, therefore, it is liable to be overlooked; but in the present case there can be no doubt that the spasmodic affection of the sphincter was entirely independent of any local disease.

This hypertrophied state of the sphincter, dependent upon its spasmodic action, is an interesting fact. Brodie mentions it in his lectures, above referred to, as follows: "The contraction of the sphincter at first appears to be merely spasmodic, without any other change of its condition; but you know that, in proportion as muscles are called into greater action, so they become increased in bulk; and, in conformity with this general rule, when spasmodic contraction of the sphincter muscle has existed for a long time, the muscle becomes considerably larger than it was in its natural state, before the disease existed." In the present case it was largely developed.

The only measure likely to relieve this complaint, is, obviously, division of the sphincter. This object the operation will certainly effect temporarily, and if it completely break up the habit, the relief will be permanent. The patient, in the present instance was, at first, perfectly relieved by the operation, and though not entirely cured, still expresses herself greatly benefited. Her bowels now move regularly every day, with only an occasional Seidlitz powder.

CASE 13.—*Constriction of the Anus in an Adult, of many years duration—Relieved by the Division of the Sphincter Muscle.*

Miss —, aged 33, of Columbia Co., N. Y., consulted me for a complaint from which she had suffered fourteen years, and which she called "piles." The most prominent symptom was extreme costiveness, a passage from her bowels being obtained with great difficulty and severe pain, and only as the effect of active cathartic medicines. The difficulty was slowly progressing, and now rendered her life very miserable. She had been treated by many physicians, and used a great variety of remedies. She had never been examined, and was somewhat diffident when this measure was proposed as necessary to a complete understanding of her case.

She at length submitted, and, instead of hæmorrhoids, I found the anus nearly closed, the passage being not larger when forced than a common quill. There was no scirrhus, the stricture being due to a simple con-

* "The Diseases of the Rectum." By Richard Quain, F.R.S., London. 1854.

traction. She was informed that she could be benefited, and perhaps entirely cured, by an operation, and that medicines would be of no service whatever, in effecting a cure. She consented to the operation, after several days reflection. Ether was administered, and the sphincter divided deeply at three points. The usual dressings were applied—free hæmorrhage occurred, so as to require a tampon to restrain it—but the wounds cicatrized readily, and she was soon able to realize the benefit of the operation. For a considerable time the relief was complete, and she considered herself cured; latterly, however, the former symptoms have begun to recur, and it is probable that, eventually, another operation will be required.

Remarks.—Narrowing of the anus in the adult, uncomplicated with scirrhus, is a rare disease. It may occur as the result of operations for hæmorrhoids, or from ulcerations, located in its immediate vicinity. Mr. White describes a form of contraction, (*Obs. on Strictures of the Rectum*,) where it has resulted from the matter of syphilis and gonorrhœa; and Dr. Bushe also reports a case which was attributable to this cause.—The narrowing or contraction of the anus in the present case was not traceable to any cause, but seemed due rather to a chronic thickening of the submucous tissue. Mr. Ashton* mentions having seen two cases of contraction of the anus by infiltration of lymph, but in both instances the complaint had been preceded by dysentric symptoms.

The treatment usually followed in these cases, is gradual dilatation with bougies. This method of overcoming the difficulty, is very tedious and painful. I should much prefer free division of the sphincter, and subsequent dilatation with bougies if necessary, as being less painful and troublesome, and affording the fairest prospect of ultimate recovery.

CASE 14.—Ulceration of the Rectum and Colon—Division of the Sphincter, Cured.

I was consulted Oct. 20th, 1853, by Judge P. P., of New Orleans, for an affection of his bowels, from which he had suffered severely for a year or more. It appears that during the prevalence of the cholera in that city, he had been accustomed whenever his bowels showed any tendency to looseness, to take large doses of anodynes and astringents, and by this means confine them for several days. The consequence of this over-treatment, was a severe attack of dysentery. He recovered from the acute symptoms, but the ulcerations of the rectum and colon remained. For the relief of distressing symptoms which they gave rise to, he had resorted to a great variety of treatment; and when he first consulted me in this city, he was on his return from Paris, where he had been under the care of different medical men of eminence, but without much relief.

His symptoms at this time were of the most aggravated kind, being increased by his sea voyage; he was much emaciated; countenance anxious, mind gloomy and greatly depressed; pulse 120 per minute; skin hot and dry, passages from the bowels frequent, containing blood, mucus and pus, and accompanied with severe tenesmus; the whole tract of the colon very tender on pressure. On examining the rectum, the finger encoun-

tered a rough ulcerated surface, very painful and hot, and extending as far as it could reach. The nature of the difficulty was evidently ulcerations of the rectum and colon, from a previous attack of dysentery.

The treatment which I adopted was perfect rest in bed, anodynes to allay the irritability of the system, and a nitric acid issue, six inches long and two wide, along the course of the sigmoid flexure and descending colon. The effect of this treatment was soon manifest in a diminished action of the bowels, less tenesmus, composure of body and mind, and a general improvement in all the functions of the body. He steadily improved and on the 25th of December left for the South, quite restored to health; although his trouble was not entirely removed.

On the 4th of June, 1854, he again came under my care, suffering from his former complaint, in, if possible a still more aggravated form. He had come from New Orleans by sea, and experiencing a rough passage, the severe and torturing symptoms of his disease had been increased, and the system reduced to a state that made him despair of recovery and threaten self-destruction to end his sufferings. The dejections from his bowels were now almost constant, attended with the most painful and harrassing tenesmus, a constant burning sensation in the rectum, and a consequent irritability of the system that admitted of neither refreshing sleep or rest.

I placed him under treatment, and in succession adopted such measures as seemed most suitable to his condition. Injections of nitrate of silver thrown high up, sulphate of zinc, etc., anodynes, and astringents with tonics, were variously administered, but with no benefit whatever. The weather now became hot and oppressive, his contemplated visit to Europe had to be given up, the passage having been already engaged, and there was great danger that his system would soon sink under the disease.—The ulcerations were evidently extending, and more and more of the tract of the colon became daily involved; the pulse was 120 per minute, and often more; stools frequent and bloody; fever at night, and extreme restlessness.

As all the remedies had been faithfully tried which offered a chance of success, I now proposed to him an operation as the only measure likely to afford relief. He gave his consent without hesitation, and accordingly, on the 15th of July, I proceeded to divide the sphincter ani. He bore the operation well, and the relief was almost immediate. Pills of *nux vomica* and conium were given, and nourishing diet. The tenesmus and constant disposition to evacuate the bowels subsided, the irritability of the system diminished rapidly, and the progress towards recovery was uninterrupted. On the 6th of July he sailed for Europe, in a comfortable condition, and suffering from none of his previous symptoms. I have occasionally heard from him since and to the present time he remains well, with no tendency to a return of his former trouble.

Remarks.—The operation of dividing the sphincter in ulcer of the anus and rectum was first practised by Boyer, and with great success, in several cases which had resisted obstinately all local and general treatment. The correctness and necessity of this treatment are obvious; if rest is essential to the healing of an ulcerated surface, in no other way

can it be more effectually secured in ulcer of the anus, than by destroying the action of the muscle upon which it is situated. The very existence of an ulcer at this point precludes all hope of a spontaneous cure. Rest is essential to the healing process, and yet the necessary irritation which the ulcer produces, induces a constant and painful action of the sphincter entirely incompatible with cicatrization of the lesion of the mucous membrane.

Division of the sphincter where ulcerations of the rectum and colon co-exist, dependent upon a previous attack of dysentery, has not attracted much attention. And yet the same necessity for the operation exists in this as the preceding instance. The constant irritation of the ulcers situated just within the anus keep up the most painful, spasmodic action of the sphincter, which compels the patient to strain almost constantly at stool, and these efforts still farther aggravate his condition by forcing along the bowel and over the irritable ulcerated surface, small quantities of faecal matter, puss, and blood. It is evident that the sphincter plays a most important part in this morbid process, and should that muscle cease to act, it could not fail to follow that the bowel would be easily quieted, and the conditions necessary to the cure would be obtained.

Mr. Ashton, before referred to, seems to regard these cases as nearly hopeless. He remarks, "should ulceration attack many points of the intestine and extend high up, the probability will be a fatal termination of the case, in spite of the most judicious measures we can employ." The success of the operation in the case above related, certainly one of the most aggravated kind, fully justified my expectations, and establishes the importance of such procedure, in similar-cases. I had operated, in 1848, upon a female, from Mass. for ulcer of the rectum by division of the sphincter, with equally favorable results; and was induced from my experience in that case, to resort to the same operation in this instance.

EDITORIAL.

To the Medical Profession of Michigan.

The Peninsular Journal of Medicine and the Collateral Sciences, has now been before the public for a year and a half. It was called into existence by the expressed wants of the profession of the State, and has done what it could for the benefit of that profession, and its conductors have the satisfaction of believing that its efforts have not been in vain. Much has been done in the way of organizing the profession in different localities. A State society is in successful operation, and various organizations have been honorably represented in the National Association. Our State and its institutions are not unknown or disregarded in that body. At the last meeting at St. Louis, the Medical Society of Detroit presented an invitation to the Association to hold, at an early date, a session in that city, which invitation has gone upon the record and will take the precedence: and, as the Northwest have never yet been favored with a meeting of this body, there is much reason to expect that a year from next May it will honor us by its presence. Before that period arrives, it is exceedingly desirable that the profession of the State should be fully organized and in active working order—that a proper *esprit du corps* should be established, and that every locality should have a representation in the Association of men well informed in the Medical Literature and news of the day.

There are, (it cannot be denied,) many regions where the profession are unorganized, where but few (if any) Journals are taken, and where much talent is being hid, and much valuable experience is being lost and forgotten for want of that intercourse of mind with mind, which organization and a common medium of communication alone can afford. We most earnestly urge to this organization for the sake of your own improvement and honor, and of the great interests of humanity committed to your charge; and we hope we shall not be regarded as obtrusive, if we suggest that we offer you in our Journal, a medium of communication such as you need. By the United States census of 1850, we see there were 854 physicians in Michigan, which numbers must have increased since that period, and

of these a large proportion are strangers to the only organ of the profession in the State.

To those acquainted with the *Peninsular Journal*, who are its regular readers, we need say little of it. Whatever its merits or deficiencies are, it must show for itself. We invite comparisons with its contemporaries, and we feel that we have a right to ask you to aid us in extending its circulation. To those unacquainted with us, and whom this article may reach, we will say that the *Journal* has passed successfully through the struggles incident to its early existence, is placed upon a permanent basis, and though it much needs your support—indeed a larger patronage is *necessary*—yet we rely so confidently on that patronage and support, feeling conscious of deserving it, that we proclaim its permanent establishment, and that it takes rank at home and abroad, with the best *Medical Journals* of the country. It will be our constant aim to keep up and improve its characters—to give it variety and interest—to give especial prominence to the diseases of our locality, and their treatment—to the organization of the profession in our State, and, eschewing all cliques and favoritisms, to deal justly and impartially by all, and so far as in us lies, to promote the harmony, the honor, and the usefulness of the profession.

We ask you all to favor us with your subscriptions and communications—they are alike acceptable, and are essential to our existence and success. Our terms are \$2 a year in advance. Address on the business of the *Journal*, Prof. E. Andrews, Ann Arbor, Michigan.

The case of Dr. Beale the Philadelphia Dentist — Effects of Ether Inhalation upon Consciousness and Will.

A LARGE portion of the *Philadelphia Medical Examiner* for December is occupied by two articles, one from the pen of E. Hartshorn, M. D., and the other from that of Moreton Stillé, M. D., upon the case of Dr. B.—the dentist, accused of the heinous offence of violating the person of a young lady in his office while under the influence of ether, which he had administered to her for the ostensible purpose of preventing the pain of a dental operation.

In Dr. Hartshorn's paper the details of the testimony are given, and the legal and scientific points connected with the affair ably commented upon.

Dr. Stillé's paper, without giving the particulars of the case which has so agitated the Quaker city, has discussed with at least equal ability the several interesting questions connected with the psycical effects of ether inhalation. Both of these gentleman have evidently partaken deeply in the excitement upon this case which for some time past has prevailed in their locality, and have taken sides strongly in favor of the accused.— Their solicitude for the honor of a kindred profession, and their sympathy for Dr. B.—both feelings doubtless being creditable to their characters, have led them, in our judgment, to act too much the part of advocates, and the scientific points connected with this unhappy affair, are perceived by them through a medium, which gives the whole subject too much of its own hue. Being entirely aloof from this scene of excitement, totally unacquainted with any of the parties, and deeply engaged with other things, we have had no information of the affair except such as derived from the briefet of newspaper paragraphs, stating that such an accusation was made, and we had not given the slightest attention to the subject, until the Examiner fell into our hands. We had therefore no prepossessions and no feelings to influence our judgment; and we proceed to an imperfect investigation of the subject with but one wish, and that is, to present the more prominent scientific principles involved in their true light. We would indeed, gladly avoid any reference to the case, and especially entering into any of its indelicate details, believing that virtuous impulses are to be developed, and correct principles established, rather by holding up examples of moral purity for imitation, than by exhibiting specimens of vice as warnings. But the matter has already had a wide publicity in the papers, and the scientific questions connected with it possess so much interest, and the welfare of the community and the character of the healing profession are so much involved, that as public Journalists, we feel called upon to present briefly the main facts in the case, and call attention to some of the scientific principles which bear upon the subject.

In passing, we cannot refrain from stating for the honor of those administering anæsthetic agents, that no other case of the kind has occurred either in this country or Great Britain, and that this instance has but a single counterpart anywhere, and that occurring with another dentist in France. And it is hoped that this will be received as a warning to all concerned, never to allow the administration of anæsthetic to a female except in the presence of her natural guardians, or in the presence of one of her own sex.

The evidence of the outrage, upon which the verdict of guilty was based, consisted exclusively of the statement of the young lady herself.

It appears that a young lady of unimpeachable character, who had for some time past been engaged to be married, was accompanied by her betrothed to the house of an eminent and highly respectable dentist, who had engaged to plug one of her teeth. They arrived about 10 o'clock A. M. She enters the house unaccompanied by her escort, and after waiting a few minutes for the exit of three other ladies, was ushered into the operating room or office. She found no one there excepting the dentist, Dr. B., who it seems was well acquainted with the young lady, and her family, having been their dentist for several years.

According to her testimony given upon the trial, she took off her bonnet and took a seat on the operating chair—and Dr. B., after washing his hands and inquiring after the family, told her that one of the men wished to speak to him, and after giving her a book to occupy her attention, left her alone for some little time. The Doctor's family were out of town, and the room next the office was unoccupied and destitute of furniture. When the Dr. returned, he commenced operations on the tooth, which gave her much pain. He proposed to apply something to the tooth to destroy the nerve, or to give her ether, leaving her to choose between the two. She chose the ether, which he proceeded to administer upon a napkin. She says, "she felt very dizzy at first, was cold and felt very numb—the effect was increased upon her; she did not lose her consciousness of what was doing; continued to breathe the ether; having closed her eyes voluntarily, she did not try to open them for some time after—she did not remember of his proceeding to operate upon the tooth; he felt her pulse several times, passing his hand up her sleeve, which was loose; then put his hand on her bosom under her dress; put his hand under her dress upon her person; of which she testified she had a distinct memory—that she was unable to make any resistance or out-cry—he then went round before her and exposed her person, of which she has a perfectly distinct memory.—She did not try to cry out, does not know whether she was able; he then placed her feet on each side of the stool; drew her to the edge of the chair; she did not know what he did after that until she felt pain as the consequence of the completion of his purposes, which she positively testifies she had a perfect consciousness of; her eyes being closed all the while, and she being unable, as she testifies, to cry out or resist, stating however, that she did not try. He then went to the washstand across the room;

she heard him pour out water into the basin—after he returned she opened her eyes, saw her clothes not re-arranged, which she distinctly recollects; immediately closed her eyes again without his seeing them open—he re-arranged her clothes, and lifted her up into the seat. In a few moments he told her he would have to take out her tooth. She asked him why that was necessary, he replied that it could not be saved. She expressed fear of pain, to which he answered he would not let it hurt her, and proceeded to give her more ether, and extracted the tooth. This operation gave her pain so that she screamed and was heard below. He then assisted her to rise, led her to a rocking chair, she feeling a little dizzy—he then left the room, and in a few minutes came up with a lady with whom he held some conversation in regard to her case. The patient soon after got up made several remarks, put on her bonnet; the Dr. accompanied her down stairs to the door, advised her to walk rather than ride, as she had some of the ether in her; she did so, stopping at an ice-cream saloon a few blocks distant, and getting some cream—she then walked to the house of a friend which she reached at 1 o'clock, and after tea the same evening, told the lady what had occurred at the dentist's.

During that afternoon her menses came on, it being the usual time.

The lady who came into the office with Dr. B. at the close of the interview, testified that nothing unusual was observed in the appearance or manner of the young lady while she saw her, and that on leaving, she made an engagement with Dr. B. to return in a few days for further operations on the teeth. A few days after, a physician, Professor Huston of Jefferson Medical College, by advice of counsel was consulted respecting the case, but declined any examination, on account of there being no soreness complained of, and on account of the presence of the menses.

These are the material facts as developed by the trial.

Now the question is, was this testimony sufficient to place beyond a reasonable doubt the guilt of the accused?

The correctness of the young lady's account—the truth of her assertion is to be considered as standing by itself, and so judged of, as it is neither supported or contradicted by any other testimony whatever.

She stands uncontradicted and unimpeached—an intelligent young lady engaged to be married, and in whose case no motive can be imagined which would induce her,—on the contrary, all conceivable motives would prevent her from making a statement of her violation, not believing it be true. We consider it clear then, that she believed herself to have been

violated. The question then occurs, Was she so violated, or did she labor under a hallucination—a delusion produced by the ether?

We confess that upon this question we feel a hesitancy in deciding, considering that in an article like this, as well as in the Jury Box, the accused is entitled to the benefit of all doubts. We should have but little hesitancy in saying that our *belief* is, that she was outraged—that the act was committed; and yet we can conceive it possible that she was mistaken.

That the inhalation of ether produces hallucinations, there is no question, but in our experience, and so far as we are informed, these impressions are not persistent;—they are remembered only as hallucinations when remembered at all, and are not regarded as realities after the effects of the ether has passed by. It is true that Dr. Stillé quotes M. Bayard as saying that sometimes patients who have taken Chloroform or Ether, “have dreams, hallucinations and illusions, which they relate with the conviction of their actual reality;” and we certainly can readily conceive cases in which the hallucination may have been so distinct, and at the same time of so repulsive a character, as to leave a conviction of its reality. Yet, has this actually been found to be the case, with any such frequency as would place it legitimately among the effects of ether inhalation? Has it occurred in the experience of Dr. Stillé, or are well authenticated cases to this effect related, or the full circumstances given by any standard writers upon the subject? If such cases do occur they are certainly rare and exceptional, leaving the probabilities altogether in favor of the supposition that the occurrence actually took place. This view is corroborated by the circumstantial manner in which everything is related, and is in no degree weakened by the absence of agitation or unusual appearances on the part of the young lady after the occurrence,—her appearance as testified to by the lady who saw her as she left. For if she fully believed herself to have been the victim of such an outrage, and this now is the supposition, her conduct towards the Dentist would have been the same as though it had been really so. The inhalation of Ether, sufficient to produce any considerable effect, must have left such an impression on the countenance, as would have prevented from being drawn any accurate inference from her expression of features. We are aware that cases are related where erotic emotions have existed when patients have been under the influence of Chloroform or Ether, and this has been urged as an objection to their use in Obstetrical practice;

but we have never had any practical evidence of such effects, and think they are far less common than some would have us believe. Admitting however, that such emotions are sometimes excited, and might have led, in this case, to temporary delusion, would they not have been accompanied with such other vague and fanciful impressions as would have convinced her of their unreality when she had recovered? And, further, could she not have judged, if she had previously been a virgin, (which of course is the supposition), from her own knowledge of her physical condition, whether this was a fancy or a reality? She almost certainly could.

We regard the probabilities then, strongly in favor of the position that the act was committed.

And if so, then the question arises—Could a person be so affected by Ether inhalation as to have the Will paralysed and the power of resistance destroyed, without the obliteration of consciousness?

That this is possible we have no doubt. Persons in night-mare, in hysterics, and in other abnormal conditions of the nervous system, are not unfrequently conscious of what is going on around them, without having the power of speech or movement. The order in which Ether affects the different functions of the system is not uniform.

The order in which ether effects the different functions of the system is not uniform. Often, when given rapidly and its full effects are speedily produced, we do not clearly distinguish any order or succession in the process—sensibility, the power of voluntary motion, and consciousness of external objects are lost nearly at the same time, and the patient is immersed in a profound, unconscious stupor.

When given more moderately and the successive stages of its operations are observed, we usually find the feelings first disturbed—the general sensibilities and emotions are altered. Next in progressive succession, the intellect is affected—mental operations are uncontrolled;—soon volition and the power of *regulating* locomotion is lost; then sensation, consciousness, and all ordinary muscular motion is lost; and lastly, if the effect continues to increase, the function of the medulla oblongata is invaded, and respiration ceases.

M. Flourens says, the succession of effects are as follows: 1st. The cerebral lobes are affected, and their function—the intellect is disturbed. Next, the cerebellum—the power of *regulating* locomotion; then the spinal marrow—sensation and motion; and lastly, the medulla oblongata, suspending respiration and causing death.

Pereira, the most erudite of all writers upon medicines, divides the effects of ether and chloroform into three stages, viz.: 1st. In which the mind is clear, but the *feelings* are altered; volition is exercised. In the 2d. stage, inebriation takes place, the mental faculties and volition are impaired, but *consciousness remains*. In the 3d. stage, consciousness is lost, insensibility exists, and what he calls "dead-drunkenness" is present.

Of this third stage he makes three degrees. In the first, or mildest, respiration [is but little impaired, — there are muscular twitchings, involuntary movements or rigidity; sometimes groans and cries occur, but there are no distinct articulate sounds. In the second degree insensibility is complete—there is no movement except that of respiration, which is of a stertorous character. The iris is fixed and the orbicularis muscle does not contract when touched. In the third degree respiration is paralyzed and death occurs.

We do not now refer to the action of chloroform directly upon the heart, as this has no particular bearing upon the case in question.

There is usually diminished sensibility to pain during the second stage, or that of inebriety—impaired mentality and volition—but still consciousness.

Complete insensibility to pain exists during the third stage and sometimes in the second, so that unconsciousness is not essential to anæsthesia. Sometimes there is *involuntary* expression of pain when there is no consciousness present, and no recollection of suffering left behind.

When the effect of inhalation is subsiding, the patient often acquires consciousness, vision, hearing, and the power of speech, without becoming sensible to the pain of an operation, and, as already intimated, not unfrequently all self-control is lost in the earlier stages of anæsthesia, while sensibility remains.

We have these varieties in the effect of anæsthetic agents depending upon individual peculiarities, upon the quantity given, the manner of its administration, &c.

We certainly, though rarely, meet with cases where sensibility as of operations, is completely destroyed, while consciousness and a degree of voluntary control remain.

At other times consciousness is nearly destroyed, while involuntary expressions show that sensibility or an organic suffering of pain remains, but where the will is enfeebled or dethroned, and where voluntary movements are greatly diminished or completely suspended.

Cases where the voluntary powers are completely suspended while the sensibility and consciousness remain entire, we would by no means represent as common, though they sometimes occur—and cases are frequent—have often presented themselves under our own observation, and in the personal experience of those with whom we have conversed, where, in certain stages of etherization, with the existence of consciousness and an acute sensibility to pain, an almost total indifference is felt to external things, and an abnormal indisposition to resist anything that may be done with them. This condition may be short of an absolute paralysis or abolition of muscular power; and yet, from this want of appreciation of danger or wrong, or indifference to either, it practically amounts to about the same thing.

Now, in the case under discussion, the witness testifies that her consciousness and sensibility were but little if at all impaired—and that this was the case with regard to consciousness is confirmed by the circumstantial manner in which she relates every thing that had occurred; and that her sensibility remained, is corroborated by the fact that when the ether was administered, subsequently, and the tooth extracted, the pain was so great that her cries (involuntary) were heard below stairs. And she also testifies that she was not able to make any resistance or outcry; though she repeatedly says she did not try.

This expresses the state of things which we fancy actually existed—she was so affected by the ether and the peculiarities of her situation, that she did not, and probably could not make a resisting effort.

In this remark we are very far from insinuating anything disparaging to the character of the young lady, and, if possible, still further from intending to palliate the enormity of the dentist's crime. She was surprised, bewildered and overcome.

It seems she had the power to open her eyes after the act, when she made the effort to do so, but she quickly closed them again without changing her position or moving her clothes, from fear, from shame, and from a desire to not have him know she was conscious of what had occurred. It is probable at the time of the act, that her modesty and moral sense were benumbed by the anæsthetic. She was in the stage of inebriation.

In drunkenness from alcohol, which this condition strongly resembles, the shame and the moral sense are overcome, while consciousness still remains, and the will is enfeebled and perverted, as is manifest in the want

of control, both over the mental operations and the physical movements—in the incoherent gurrality and the feeble and unsteady gait. The man who will take advantage of this state of the system to gratify his passions, is quite as guilty as if perfect unconsciousness was induced, or the limbs were tied with cords, and should receive the same penalty of the violated law.

The idea which Dr. Stillé seems inclined to convey, that the full power of will exists, and consequently free agency and accountability, until consciousness is entirely destroyed, we regard as wholly untenable. It may be true as a general fact, "that if the muscles and the voice have been paralysed, so also has the outward consciousness." Still this is by no means always the case, and much less is it always the case that an appreciation of right and wrong exists, and an ability to do the right and resist the wrong, in all cases where consciousness is present. The law makes a distinction between insanity and drunkenness—holds the drunken man responsible and acquits the insane, only because the drunken man voluntarily induces his condition, knowing the usual results of such a state, while the insane man is the victim of a disease beyond his control. As a summing up of the points which, in our view, bear more directly on this case, we submit the following propositions, differing in their character and tendency from those presented by Dr. Stillé at the conclusion of his article, and which we think quite as worthy of consideration:

1. As a general fact, in the speedy Inhalation of Ether or Chloroform, to an extent to procure suddenly their full anæsthetic effect, the Sensibility, the Will, and the Consciousness are nearly simultaneously overcome.

2. In some cases, before a sufficient quantity is taken to produce these full effects, voluntary muscular motion is suspended, while sensibility and consciousness remain.

3. That much more frequently when only partial effects are produced; the appreciation of right and wrong—and of propriety and impropriety are overcome, and an abnormal indifference to external circumstances, and an indisposition to resistance are present while sensibility and consciousness exist.

4. That in these cases moral freedom and consequent accountability, especially for acts suffered, are absent.

5. That liberties taken with a female in this State, should be regarded in the same light as if either lunacy, idiocy, infancy or total unconsciousness existed, or the powers of resistance were forcibly overcome.

On the whole, in carefully reviewing this case, though it is not so clear as to remove all apprehension that an innocent man may have suffered, yet we regard the probabilities of guilt so strong, as not to be altogether dissatisfied with the verdict of the jury.

We are aware that charges of this kind are easily made, but hard to be repelled; and that the evidence of the female, where fear of exposure in wrong, or any other strong motive can be found for false statements, should be received with caution; yet it must be remembered that the nature of the case generally admits of proof only from this source;—and the safety of community,—of “wives and daughters,” loudly demands the stern protection of the law. It may be questioned whether the interests of humanity are best subserved when nine guilty men escape through fear that one innocent shall suffer.

A. B. P.

Transactions of the American Medical Association.—Vol. VII., 1854.

This volume, the reception of which we had merely time to announce in our last, presents the following table of contents—*viz*:

Minutes of the Seventh Annual Meeting of the Association; Address of U. Parsons, M.D., Vice President; Report of the Committee on Medical Education; Report of the Committee on the Epidemics of Kentucky and Tennessee; On Erysipelas, by R. S. Holmes, M.D., of St. Louis; On Medical and Toxological properties of the Cryptogamic Plants of the United States. Report on the Epidemics of Ohio, Indiana, and Michigan, for the year 1852—'53; do. of Louisiana, Mississippi, Arkansas, and Texas, in the year 1853; Prize Essay; Report of Norwalk Disaster; Dr. Linton's Remarks on Yellow Fever; Report of the Committee of Publications; Report of the Treasurer; Catalogue of the Officers and Permanent Members; Index.

The whole volume contains 668 pages, printed upon excellent paper, in clear type, with several well executed illustrations, though fewer than have appeared in some of its predecessors. It is respectably bound in cloth, and, on the whole, presents an appearance highly creditable in mechanical execution to the N.Y. publisher, Charles B. Norton. The work is in the possession of the profession somewhat earlier than its predecessor, but considering its diminished size and the fewer number of illustrations,

there has not been such a difference in the respective periods of appearance, as the statements, made by some of the delegation at St. Louis, led us to hope for. However, it is on hand in good shape and in fair season, and we have no fault to find.

We have not had time for a careful reading of the whole of the contents of the volume, but from the hasty separate examination, and the more particular one of some of its parts, we regard it as comparing favorably, in the quality of its matter, with the products of former years.

Our Easy-Chair.

Nor our Chair-Editorial or our Chair-Professorial; to these the term would not apply, as they involve *hard* work and *hard* thought, and it would seem, remotely and sympathetically, or antagonistically *hard* feelings also. Neither does this caption signify that imaginary "Easy-Chair," from which, as in Harper's Monthly, issues a comfortable and agreeable chat, (if that can be called chat in which the talker, or writer, has it all his own way) about matters in general in the great world. And though our "Easy-Chair" has a "Drawer," it is not *that* Drawer, out of which, as in the same Monthly, comes forth so many scraps—humorous, pathetic, and always amusing. Indeed, we mean no mythical, figurative, imaginary article whatever, but a real, substantial, black-walnut Easy-Chair, with a spring cushion, cappillary stuffing, hair-cloth covering and with brass and iron castors; and above all in interest and importance if not quite so in position, a *writing* and *study leaf*—of precisely the right shape and in exactly the right position, capable of easy movement from side to side, and of having its angle elevated or depressed to suit occupants. It has, as already intimated, a drawer just right for *holding* "stationery,"—a cozy place for ink, which, when the drawer is *cut*, is *in* just the spot.

The "leaf" is capable of expansion, by a slide from underneath, to increase the surface for books or papers, and the Easy-Chair allows of a perfectly erect position of the occupant, with the back and arm supported when in the act of writing.

This is no puff for a "consideration," save a regard for the ease and comfort of our readers, and for the improvement of the profession; as many a practitioner would be induced to read and write, perhaps for the

Peninsular Journal, had he such a contrivance; whereas, after the fatigue of the day, without it, he would seek physical repose in positions where he could do neither.

The article is said to have been contrived by a distinguished servant of the public, *outside*, and the mechanical execution is performed by less distinguished public servants, *inside* of the great State Industrial Institution at Auburn, N.Y., and was obtained from Hewson & Parsons in that place, costing there, packed, the moderate sum of eleven dollars, the order and money having been sent by mail.

We are quite confident if any of our readers who may not possess a convenience of this kind, should act upon this suggestion, and get an easy-study and writing-chair, they will often feel thankful for this information, notwithstanding it occupies so much space. Matters of this kind are more important than we usually consider them. Very much of our comfort, and even usefulness, depends upon *little things*. A. B. P.

N. E. District Medical Society.

The following notice reached us too late for the December number. We insert it with great pleasure, and we trust that the men of the North East, who have hitherto been the banner society of the state, will turn out to the meeting in full force.

Utica, December 5th, 1854.

Dr. Andrews:

Dear Sir,—The second annual meeting of the North Eastern District Medical and Scientific Association takes place at Romeo on the Second Wednesday of January, 1855. A Public Address will be delivered by the president of the Association.

W. BROWNELL, Secretary.

Books Received.

We have received from the publishers, S. S. and W. Wood, New York, a package of splendid works, just published. They came too late to be fully noticed in the present number, but we will acquaint our readers with them in our next. They are "Comstock's and Coming's Principles of Physiology," quarto, with colored engravings, "Hassall's Microscopic Anatomy," "Dublin Dissector," new edition, "Godard on the Teeth," "Harrison's Anatomy," "Beck's Infant Therapeutics," second edition, and "Wood's Catalogue of Medical Books for 1855." The latter is a

new catalogue of the most extensive collection of Medical Books on sale in this country. Copies of the catalogue will be sent by mail *free of postage*, to all *post paid* applications. Address for this purpose, S. S. and William Wood, publishers, New York. All these works are sold by A. B. Wood & Co., Ann Arbor, Mich.

We have also received from the publishers, Lippencott & Grambo, of Philadelphia, a fine work, of which we have prepared a full notice, but are compelled to defer it till next number for want of room. For sale by A. B. Wood, Ann Arbor.

The American Eclectic Dispensatory. By John King, M.D., Professor of Obstetrics and Diseases of Women and Children in the Cincinnati Eclectic Medical Institute; formerly Prof. of Mat. Med. Therapeutics, and Medical Jurisprudence in the Memphis Institute. Cincinnati: Moore, Wilstach & Keys, 1854.

THE above is the title of a ponderous volume of 1,391 pages, which we find on our table by the politeness of the publishers. Since its reception the urgent nature of other engagements has prevented us from giving it such an examination as we should like to do before expressing fully an opinion of its merits,—but the hasty examination we have been able to give it, has convinced us that a very great deal of labor has been bestowed upon the production, and that it contains an account of a larger number of the medical plants indigenous to our country, than any other work with which we are acquainted.

The first 980 pages is devoted to the description, uses, &c., of different medicinal articles, mostly, though not entirely vegetable, arranged in alphabetical order. This is preceded by a “Botanical Arrangement of Plants”—and the remainder of the volume, about 400 pages, is devoted to Pharmacy. The botanical and descriptive portion of the work, so far as we are able to judge, appears to be executed with correctness and clearness, and the alleged medicinal virtues of the various articles are succinctly stated. In looking over the description of the medicinal effect of the articles, we should scarcely get the impression that the author possessed views different from those of many of our standard writers, and, so far as we have examined, we have not been able fully to gather what the peculiarity of the author’s general therapeutical doctrines are, but should infer that without holding any very peculiar views at all, or adopting any exclusive general system, he differs from the regular schools of medicine, chiefly in discarding some of our most powerful and, when properly

applied, most *useful* remedial agents, and in seeking to supply the deficiency by seizing upon a grearer variety and number of indigenous plants.

Now, we do not propose to have any particular quarrel with these self-styled Eclectics. If they denounce any of our agents, it will not destroy our confidence in them as long as we clearly see their good effects, and if they prove that any of their substitutes for our remedies are more efficacious and less injurious, we are bound, and shall be most happy to adopt them; for *we* are the true Eclectics—excluded by no prejudices or theories from the use of any agent, ponderable or imponderable, vegetable or mineral, in large doses or small; poured into the stomach, inhaled into the lungs, injected into the veins, or rubbed into the skin, that shall answer our purpose in removing disease and restoring health. And, besides, we are regardless, comparatively, of the source from which it comes,

“ We seize on truth wherever found,
On foreign or on native ground.”

In looking at some of the descriptions in this volume, we see some statements which seem quite novel, and induces us to ask, “Are these things so?” For instance, the plant *caulophyllum thaliethroides*, or blue cohosh, is a plant, he says, used by “Eclectics;” and after dilating somewhat upon its numerous virtues as an emmenagogue, parturient, antispasmodic, diuretic, diaphoretic and anthelmintic; and of its successful employment in rheumatism, dropsy, colic, cramps, hiccough, epilepsy, hysteria, uterine inflammation, &c.; and farther, of its great virtues as a preparatory parturient, taken for some weeks beforehand to facilitate that process; he says, “In decoction, blue cohosh is preferable to ergot for expeditious delivery, in all those cases where the delay is owing to debility, or want of uterine nervous energy, or in the result of fatigue.”

We should conclude from what we gather in this work, that the “Eclectics” were of the empirical, in contradistinction from the rational school of medicine—as very little reference is seen to pathological conditions, or to a *priora* principle; a list of diseases being given in connection with each remedy, for which, in general terms, the medicine is declared to be good. But in charging this upon the work in hand, we must not forget that the same criticism will apply to other works on *Materia Medica*. The Pharmaceutical part of this big book seems to be full, and the author, in treating of the mode of preparing different officinal prepara-

tions of the regular faculty, uses, without scruple or ceremony, the results of the labor of others.

In an appendix there are several very useful tables—such as the specific rarities of different articles—boiling paints, saluicity of salts, formula for freezing mixtures, &c., &c.

On the whole, we are much obliged to the publishers for the book, and intend to make use of its contents, whenever we can make them available for the purposes of instruction or the benefit of our patients.

A. B. P.

[THE following extract of a private letter from our friend, A. Young, M.D., a former private pupil, from the concise account given of several cases of interest in practice, can but reward perusal. We would be glad of such accounts frequently from Dr. Y., and others, as we are confident they would interest our readers as well as ourselves.—*Eds.*:]

BRUSH HILL, ILLINOIS, NOVEMBER 27TH, 1854.

DR. PALMER: DEAR SIR,—Thinking that you might like to hear how I am progressing, I improve a few leisure moments by rendering a little information upon the subject.

I have been quite busy most of the season, though at present the sickness has almost entirely abated. The diseases in this section have principally been remittent and typhoid fevers and dysentery. They have all assumed a much more severe character this season than last. I found dysentery the most difficult to treat satisfactorily. It was frequently complicated with intermittent and remittent fevers. I used, in a few cases, iodine, injected with strikingly beneficial results. In others it seemed to do no good. My formulæ was: iodine, iod. potass., aa, grs. v.; tr. opii, gtts. xx; mucilage, 3 ij. In three mild cases one injection controlled the dysenteric charges immediately, with no relapse. In another, which was as severe a case as I ever saw recover, two injections completely changed the character of the discharges, and the patient steadily progressed to convalescence.

I have used the *f. veratrum viride* in four cases of typhoid fever, and the result has been confirmatory of the opinion expressed by Dr. Norwood respecting it. Although not quite as sanguine as he, I think it to be a very valuable remedial agent in this disease. I have said that typhoid fever has prevailed here, yet, according to strict nomenclature, I suppose that they are not *typhoid*, for in a large proportion of the *continued* fevers which I have met this season there was no *intestinal* complication, the bowels being constipated rather than the reverse.

A few days since I met with a case of membranous croup; had been sick forty-eight hours before I saw it; there was every appearance of rapidly approaching dissolution. (The patient was a German child, aged fourteen months.) I gave at once a large dose of turpeth mineral and repeated in a few minutes. It produced free vomiting of thick tenacious mucus, mixed with shreds of false membrane. I then cauterized the larynx with an almost sat. sol. argent. nit., put the patient upon a mercurial and expectorant treatment—repeated the cauterization three times, at intervals of 8, 24 hours, and in three days the child was well. The case was interesting to me on account of the advanced stage of the disease, and as showing the efficiency of the nit. silver in this stage, although the other measures adopted were undoubtedly powerful adjuvants, especially the hydrarg. sulph. flav., upon which I place great reliance.

I remain yours truly,

A. YOUNG.

Medicinal Extracts.

We would call attention to the advertisement of Tilden & Co., 98, John street, N.Y.

The inspired alcoholic and hydro alcoholic extracts, prepared in vacuo, have for some time been before the profession, and to those who have had the privilege of examining and testing them, no commendation from us is needed. A suite of their preparations, recently presented to the Medical Department of the University of Michigan, had given us an opportunity for inspection, the result of which, combined with our previous knowledge derived from using them in practice, has fully convinced us of their great purity and strength. Their mode of evaporating inspired juices in vacuo at a low temperature, preserves all the virtues of the plants and presents them of reliable and uniform strength. We have a word of caution to those who have been in the habit of using a scorched, dirty, and inferior article too often found in the shops; and that is, be careful of your doses. Commence with minimum quantities and feel your way cautiously up, lest you give an over-dose of one of the powerful narcotics. Our thanks are due the proprietors, in behalf of the University, for their donation.

Obituary.

We regret to learn of the death of Dr. W. W. Gough, late of York, Michigan. He was at the time of his decease, at Napoleon, Michigan. He died on the 21st of November.

Dr. Gough had been aware for some years that he was gradually falling a victim to consumption. In spite of every effort it made a gradual progress, until in October last, a pleuritic inflammation ensued which resulted in a large serous effusion into the left pleura, causing great difficulty in respiration. He was relieved from this by the operation of

paracentesis thoracis, so far as to be able to be removed to Napoleon. Concerning the further progress of the disease we are not particularly informed, but we understand that another effusion took place subsequently which burst or ulcerated into communication with the bronchial tubes and caused his death by strangulation.

Dr. Gough, though still young, was already an ornament to the profession. Our readers will remember his careful account of an epidemic fever which prevailed in York, which showed unusual clearness in his powers of observation. His religious and moral character stood high, and his last hours were bright with that hope which triumphs over death.

To Correspondents.

Several valuable contributions are deferred till next No. for want of room.

The Inebriate Asylum.—We notice with great pleasure the movement now on foot, under the fostering care of the legislature of the State of New York, for the establishment of an institution to be known as "The United States Inebriate Asylum." The object is to provide an asylum for the poor inebriate, where his physical and moral condition will be alike the care of the physician and the philanthropist, and where his labor may be rendered productive and of service to his family.

With regard to the propriety and necessity of such institutions, the authority of Dr. Benjamin Rush is quoted, and the venerable Dr. J. C. Warren of Boston, and various other eminent and philanthropic medical men have favored such a project.

Dr. Rush says: "To the account of physical remedies, I shall add one more, viz: the establishment of a hospital in every city and town in the United States, for the exclusive reception of hard drinkers. They are as much the objects of public humanity and charity as mad people. They are indeed more hurtful to society than most of the deranged patients of a common hospital would be if they were set at liberty."

The directors, at the head of whom is Hon. Washington Hunt of Lockport, N.Y., say "the institution is not designed to conflict with any other methods for saving the inebriate. There is nothing, we believe, similar to it in this or any other country. Every where goes up the wail of wretched humanity, of prostrate and suffering brothers; from every side comes the cry for help. They are the true workers who respond to this cry. They are enriched by giving and blessed in blessing."

To carry out this work \$50,000 is required. This amount is divided into shares of \$10 each. Any person wishing to subscribe to the capital stock, can send his name, with the amount he will take, to any one of the directors.

We regard an established habit of inebriety as a disease, affecting the whole physical, moral, and intellectual man, and are rejoiced at the prospect of the establishment of an institution where it will be treated as such, and shall watch with interest the results of this experiment, both in its scientific and humanitarian aspects. If drunkenness cannot be prevented, it should, if possible, be cured. If the *State* cannot be converted into an asylum from inebriety, then let us build hospitals to relieve humanity, as far as possible, from its curse.

THE
PENINSULAR
JOURNAL OF MEDICINE
AND THE COLLATERAL SCIENCES.

VOL. II.

FEBRUARY, 1855.

NO. VIII.

ORIGINAL COMMUNICATIONS.

ART. I.—*On the Induction of Puerperal Fever, by Inoculation, (so-called.)* By Z. PITCHER, M.D. Published at the request of the Detroit Medical Society.

HAVING given some attention to the study of epidemics and especially to the epidemic manifestation of puerperal peritonitis, with a view to correct or confirm thereby the results of my own experience, and to test by the standard of others, the faithfulness of the records I have made of my own observations; I have been led, whilst engaged in that pursuit, to contemplate the evidences of an indwelling unity of design in the mind of the Creator, as shown forth in the construction of the great family of invertebrata, upon the model of an archetype; upon the universality of some of the laws established for the preservation of the life of the individual and securing perpetuity to that of the several races; and to admire the similarity which marks the results that follow the disturbance of these laws, which ever end of the scale you strike. The contemplation of this unity in structure, this universal amenability to general law, led me naturally to inquire whether there might not be an archetype of abnormal being, constituting the morbid essence, the element of unity, the unvarying offspring, begot by a violation of those sanitary laws, made to govern the hygienic positions to be occupied by the creatures of his hands.

Whether the idea of a nosological archetype may be a figment of the brain or not, of one thing I am certain, that in the writings of all those gentlemen to which I have had access, who have described this disease from personal observation, at a time when it has been clothed with the pallium of a pervading pestilence, an idea of unity sufficiently distinct to give origin to such a conception, may be found in the similarity of its mode of access, in a like proclivity, when not arrested by remedies, to a fatal result; by its taking on the same grade of action at every recurring visitation, no matter what the interval between them; by its running into or through the contemporaneous diseases in every infected locality, and by its producing such similarity in the morbid changes found on post mortem examination, varied when not identical, by the duration of the disease, prior to dissolution, whether the individual writer considers it a uterine phlebitis, an inflammation of the ovaria, a metro-peritonitis, or a disease of the omentum.

It is true, also, that in the writings of those authors whose works, when collated, tend most strongly to show a community of character in the graver epidemics, there is no internal evidence of a design on their part, to produce such a result. This is imputable to their fidelity in recording passing events, and their skill in sketching fleeting phenomena, notwithstanding the diversity in the purposes which moved them to write. Hence the value to be placed upon their observations, when made to pass in review before a mind endowed with the faculty of generalization, such as distinguished Benjamin Rush, one of the ornaments of a by-gone century.

This is a task, I do not propose to undertake at this time. I should delight however in the labor, if I thought myself competent to perform it successfully. But as I propose to speak to a particular question, the consideration of which leads me into this field, I shall introduce the names and opinions of others, only so far as may be necessary for the accomplishment of the purpose, I have now specially in view.

That purpose is obscurely intimated in the title I have given this paper. The opinions I have formed on that subject and desire to enforce, may as well at this time, be more explicitly avowed.

Having been led by numerous examples, most of which have occurred in my own practice, to adopt the belief, that puerperal fever is in a majority of cases, essentially a traumatic erysipelas, the predisposition to and approach of which, may be foreseen and guarded against, I consequently repudiate the idea of its propagation by the touch of the accoucheur, and

hold it to be fallacious to resort to such extraordinary modes of explaining phenomena that may be accounted for, on the same principles that are applicable and daily appealed to, in speaking of the spread of other epidemic diseases, such as influenza, typhoid fever and the dengue of the south, all admitted to be dependent upon a peculiar atmospheric constitution and in the opinion of many, spread by the influence of a special contagion.

If the testimony I shall extract from others who have written, without having in view the purposes by which I have been actuated, when corroborated by statements that I shall make on my own authority, prove sufficient to establish the first point, there will be no great necessity for wasting time in the discussion of the other branch of the subject, unless we throw open the door for the hearing of the whole argument on the question of contagion, to prove or admit the existence of which would be going farther than would suit the purposes of those who oppose our opinions, because if puerperal fever is found to be an unqualifiedly contagious or infectious disease, it should be communicable to the pregnant as well as the parturient female, and why not as well to persons of either sex or any condition? Certainly I should prefer to become the advocate of this opinion than that of Dr. Watson, to be referred to hereafter.

It is not my expectation to enlarge the boundaries of knowledge by any observations I may make on this subject, but if I can induce any one, by a new arrangement of the facts known in the case, to take more practical or utilitarian views of it, I shall have accomplished the purpose I have in view; and perhaps may be instrumental in holding back the hand of the destroying angel already outstretched to strew "the fruit of man's first disobedience" upon the couch of some fair spirit, now the star of hope in some happy, unsuspecting household, whose light sheds a hallowed tint upon every object on which it falls, whose form is the object of pride and whose mind is the well-spring of social enjoyment. What painful experience has taught me to believe, I desire to impress upon the minds of others so that they may be spared the sting of futile regrets, by the timely interposition of recognized instrumentalities, which, under the sanction of a providence who tolerates the agency of man, in the accomplishment of ends and purposes marked out by himself, may avert apparently impending calamities.

I repeat then, that epidemic puerperal fever, is an erysipelatous inflammation, which prefers to attack the cellular tissue, that its presence

in the system may be the occasion of abortion, of premature labors;—that it is often developed before parturition and still more frequently excited into activity by the incidents of labor, all of which, may many times, be averted by the discriminating and judicious physician.

We know but little of the early history of puerperal fever. From Dr. Hulme, we learn that Hippocrates makes allusion to it, as arising from a suppression of the lochia. But there is no evidence of its having prevailed as an epidemic, prior to 1746, when it was extremely fatal in Paris and especially at the Hotel Dieu, where nearly all died. A few years later, notices of its prevalence in England, are also to be found, but no records of its occurrence as an epidemic in either country, have been preserved prior to the establishment of lying-in-hospitals. This chronological relation of the institution of hospitals, and the appearance of this disease, I consider altogether accidental. It is more probable that the disease begat the institution, than that the institution generated the disease. Furthermore, we should not look for records of the diseases of females particularly, before competent men, by the study of specialties, had been brought out by the endowment of institutions, either for the relief or the study of particular diseases.

In the descriptions given of its appearance in different countries, and in the same countries, at different epochs, there is a striking unity in the generic signs and the general concurrence of symptoms of the epidemic diseases, whilst the differences in the mode of attack, the aspect, progress, and morbid results which obtain, between them, and the sporadic disease are so great, that they are to be contrasted, rather than compared with each other. The type of this affection, when occurring epidemically, is so blended with concurrent or contemporaneous diseases, one of which will so impress itself upon another, that the dominant affection can scarcely be distinguished, and those contemporaries of the epidemic are so nearly the same in all the epochs, to which puerperal fever has given character, that a description of one with its concomitants, is a picture of any epidemic that has preceded it or that may come hereafter. What these attendant affections upon puerperal fever have been, at different times, since that disease became a subject of history, will be shown in the following quotations, for the opportunity of making which, I am indebted to the perusal of several valuable monographs on this subject, republished by the London Sydenham Society.

These I shall arrange with a view to show, 1st, the unity in character

of the different epidemics. 2d, the manifestation of the disease in many cases prior to parturition—and 3d, that the disease when epidemic, is not confined to the wards of lying-in-hospitals.

Mr. Hey, of Leeds, speaking of an epidemic puerperal fever, which commenced in Barnsley in 1808, in Leeds 1809, and continued in the latter town till 1812, says it was coincident with an epidemic erysipelas.

Dr. Douglass who has written a graphic description of the epidemic of Dublin, in 1810 and 1811, goes one step beyond Mr. Hey, and makes this remark, "the contagious puerperal fever of Dublin, is, I venture to pronounce, neither more nor less than a malignant fever of a typhoid type, accompanied with an erysipelatos inflammation of the peritoneal covering of the stomach, intestines and other abdominal viscera."

Dr. Labatt, also of Dublin, in a communication addressed to Dr. Fleetwood Churchill, makes this statement: "From the sad experience of this epidemic, I am satisfied that the contagion of Typhus fever is capable of giving rise to puerperal fever; that puerperal fever is communicable from one patient to another, and also that it could be carried from the sick by an attendant, to women in child-bed, who were previously free from disease."

Puerperal fever was epidemic in Birmingham, England, most of the time from 1826 to 1836. Dr. Inglesby, who gave an account of it, says that "erysipelas prevailed extensively in the hospitals, and in the town, and that the concurrent diseases did not admit of the usual active treatment."

Dr. Robert Fergusson in remarking upon the mortality from puerperal fever, at the general lying-in hospital, as if in explanation of it, says: "I may add, that the present year (1838,) has exercised an exceedingly fatal influence in every species of fever, all of which were of the low or typhoid type."

And Mr. Tonnellé, in describing an epidemic metro-peritonitis, which prevailed at Paris in the practice of M. Desormeaux in 1829, by his division into the inflammatory, the typhoid, and the ataxic, shows its relation to the other forms of disease then prevalent in the French Capitol.

Mr. Ceely, of Aylesbury, has described an epidemic puerperal fever, which occurred in that city and vicinity in 1831, during the prevalence of erysipelas, which exhibited a mild, a phlegmonoid and a typhoid form, and the puerperal fever seems to have assumed analogous characteristics.

Dr. McClinlock gives an account of an epidemic of this nature, which prevailed at the Dublin Rotunda Lying-in hospital, in 1845. From him we learn, that "fourteen women were attacked in a few days, of which ten died. Of the fourteen children of these women, one died of rapid trismus, one of erysipelas, and three of convulsions. During this time, erysipelas was prevalent in the surgical hospitals of the city."

Dr. Lowder of London, a cotemporary of the more celebrated Dr. Gooch, from whom the remark is quoted, says of the puerperal fever that was prevalent in his day, "that the inflammation was erysipelatous and the fever typhoid."

Dr. Collins, the author of a valuable treatise on midwifery, speaks of the concurrent existence of typhus and puerperal fever in Dublin, in 1826 and 1827. And from Dr. Beatty, of the same city, we learn that erysipelas, typhoid and puerperal fever were all prevalent in 1835 and 1837.

Dr. Fleetwood Churchill, who expresses the opinion that there is some special connection between puerperal fever, and lying-in-hospitals, recognizes the concurrence at the same time, of gastro-enteritis, typhus fever and erysipelas, as epidemics with puerperal fever; and he assents to the probability, that they are the same disease, and Mr. Nunnally, who is referred to by him, asserts that they may reproduce each other.

In the report of the Committee on Epidemics, for the district composed of Ohio, Indiana, and Michigan, addressed to the American Medical Association, we find the following, from Dr. H. G. Cary, of Dayton, Ohio, who speaks also, of the occasional prevalence at the same periods, of Typhoid Fever, Scarletina, Erysipelas and Peritonitis.

"In the northeast, northwest and southwest corners of the county, (Montgomery) epidemic erysipelas prevailed the same year as above."

"As at Dayton, pregnant females advanced in gestation, were exceedingly prone to premature labor; and the period of accouchment was looked to by the patient and physician with the deepest anxiety and solicitude.

Enough has been said perhaps, to show the consanguinity of several of the graver epidemics; and the relationship no doubt extends to the oriental plague and Asiatic cholera.

With such evidences of the consubstantiality of epidemics, and of their dependance upon some atmospheric distemperature, not appreciable by the meteorologist, it seems hardly necessary to bring forward authority, to show that one of their forms is any less liable than the others, to make its

appearance independently of contagion, although it may be carried from an illventillated apartment by a third person and communicated to another, whose circumstances favor its reception.

Of the prevalence of puerperal fever, in the population outside of the hospitals, at the same time that it was committing its ravages within them, we have the testimony of various witnesses. That it should be less prevalent and less fatal where the subjects of it are dispersed in private houses, we should expect, for the same reasons, that would render typhus and typhoid fevers milder and more manageable, the absence of a concentrated poison, which, when present, depresses the powers of organic existence.

"In the Westminster Hospital, between November 1769 and May 1770, (being the epidemic season,) out of sixty three delivered, nineteen had child-bed fever, and fourteen died. From the 15th of May, 1770, to September, 1772, 305 were delivered and only two died.

Dr. Leake also shows, from the bills of mortality, that the epidemic must have prevailed beyond the hospital, for from December 12th, 1769, to December 11, 1770, 270 died in child-bed, whereas only 185 died the preceding, and 172 the following year."

Dr. Campbell, who writes on epidemic puerperal fever, states that puerperal fever visited the Edinburgh Lying-in-Hospital a second time in 1814 and 1815, "and of nine who were taken ill only one recovered. The disease prevailed throughout the city epidemically, at the same time, but from all accounts I can collect, it showed itself earlier among patients in the city, than among those in the Lying-in-Hospital."

"Sydenham," as quoted by Dr. Leake, has observed, that the fever which follows a suppression of the lochia, sometimes changed its type to that which prevailed in the epidemical season."

"That women, after delivery, are more disposed to fever at one time than another, according to the constitution of the air, cannot be doubted, considering its great influence on valetudinary habits, and on diseases in general; but particularly the small-pox, epidemical dysentery, and ulcerated sore throat."

This susceptibility of the parturient woman, which is participated in by the pregnant one, to the influence of an epidemic miasm, will not only prove the existence of such affections in community generally whilst they are prevalent and fatal in hospitals, but will assist in explaining why puerperal fever is sometimes an erysipelas and sometimes a

typhoid fever, sometimes a malignant dysentery and sometimes a cholera. The reason of this susceptibility is thus accounted for by Dr. Kirkland, who wrote in 1774:

“Indeed it cannot be doubted by those who have had opportunities of improving themselves, that in the pregnant state the uterus is more irritable than usual; and that this irritability is more or less increased during labor is not less evident; nor is this irritability confined to the uterus only, but extended to every part of the body. Consequently, people in this situation will be readily and violently affected by any cause that increases this perternatural irritability of the nerves; accordingly it has been observed from the days of Hippocrates, that women in childbed are very liable to epidemic diseases; and it might be from this cause, that in one of the plagues at Constantinople, most of the women in childbed died.”

A right interpretation of the preceding facts should prepare us for the exercise of such a scrutiny in epidemic seasons, as would enable us to detect the first dawnings of disease and obviate their fatal developement, by the application of preventives, either in the last weeks of gestation or so early after parturition, as to rescue many from the embrace of death who would otherwise meet it prematurely, in a form most dreaded by the victim, and most trying to the sensibilities of surviving friends.

In relation to the accession of this disease, prior to the time of parturition, a standard authority of the last century (Denman) makes this remark: “But as this disease may be sometimes foreseen in the time of pregnancy, by an uncommon degree of fever and unusual uterine pains, and as the causes of it may be often removed or avoided during the time of labor and after delivery, it may be expected that this part of our subject should be more minutely examined. The time when puerperal fever comes on is uncertain. There are not wanting instances where it has been evidently formed before delivery.”

Dr. Butter, a cotemporary of Denman, in “an account of the puerperal and remittent fever,” commences in this language. “On the second or third day after delivery, whether of a ripe or unripe child, and sometimes a few days before such delivery, the women when exposed to febrile causes, is seized with a cold fit, which is succeeded by headache, giddiness, noise and throbbing of the ears, &c.”

Dr. Joseph Clark speaks more emphatically on this subject. “Most writers have positively asserted that puerperal fever never affects women

till after delivery; and yet I have dated the attack of some of our patients at an earlier period. Several cases have occurred to me, in which it was clear that some disease existed before delivery; and dissections after death have exhibited all the appearances usually found after this fever. A case of this kind occurred so long ago as 1782, in which the patient died in thirty-six hours after delivery. A second case happened in the autumn of 1786, where appearances were still less equivocal:—a patient expired two hours after a tedious labor, apparently exhausted. On opening the cavity of the abdomen, the following day, all the ordinary effects of puerperal fever were found very distinctly marked.”

But the views which these several extracts are designed to sustain, are by no means uniformly adopted. Those who entertain different opinions have a right also to be heard. The first authority we quote from is Mr. Charles White, F. R. S. who says that “Women during the time of lying-in are subject to this fever.” After speaking of stays, petticoat bindings and big pockets, and other domestic and local causes of the disease, he remarks, let the directions I have given be strictly observed, and I will venture to assert that there will be neither puerperal nor miliary fever. As if in justification of this assertion he adds further, “Out of the whole number of lying-in patients, whom I have delivered (and I may safely call it a great one) I have never lost one, nor, to the best of my recollection, has one been greatly endangered by the puerperal, miliary, low nervous, putrid, malignant, or milk fever.” If the author of the foregoing had emphatically stated that he had never seen this fever in its epidemic and malignant form, I should have been no better assured than I now am, that such was the fact. With him, though an intelligent writer, it is hardly necessary to waste more time, as the opinions emanating from such a source, must be, in a great degree second handed.

Dr. Alexander Gordon, of Aberdeen, whose opinions are entitled to the highest respect and who in practical acumen seemed to have been nearly related to our departed fellow countryman, Dr. Dewees, has written very unreservedly on this subject. His thoughts on the close relationship of coexisting epidemic diseases, are frankly expressed. What he says on that point I have reserved for this place, to introduce it out of its order for the sake of the context.

“That the puerperal fever is of the nature of erysipelas, was supposed by Pouteau forty years ago, and has been the opinion of Drs. Young and Home, of Edinburgh, since that time. I will not venture positively to

assert, that the puerperal fever and erysipelas are precisely of the same specific nature; but that they are concomitant epidemics, I have unquestionable proofs. For these two epidemics began in Aberdeen at the same time, and afterwards kept pace together; they both arrived at their *acme* together and they both ceased at the same time."

"The analogy of the puerperal fever with erysipelas, will explain why it always seizes women *after* and not *before* delivery. For, at the time when erysipelas was epidemic, almost every person admitted into the hospital with a wound, was soon after seized with erysipelas. The same consequences followed the operations of surgery."

"Just so," he says, "with respect to puerperal fever." But this disease seized such women only as were visited or delivered by a practitioner, or taken care of by a nurse, who had previously attended patients affected with the disease."

If these affections are so nearly identical as claimed to be by Dr. Gordon, why should not the parturient female have been as liable to attacks of it from atmospheric agency as the wounded man, without the instrumentality of an infected nurse or accoucheur? We apprehend that then as now, there must have been many exceptions to the Doctor's rule carelessly overlooked.

Believing fully from experimental tests applied by myself that erysipelas and typhoid fever may be communicated from one person to another, occupying the same apartment, I can very well understand how cases may be multiplied within the wards of a hospital, and the fact is explained in the same way as you would account for the increase of hospital gangrene, among wounded soldiers; but how so grave a disease as puerperal fever, can be transplanted by the touch of a person in perfect health, who has had no communication with the disease for days and perhaps weeks, is as difficult for me to comprehend as that the royal touch should heal the scrofula.

But there are gentlemen eminent in the profession who embrace opinions entirely antagonistic to ours; by whom contrary views are entertained, opposite opinions expressed and eloquently enforced. As these gentlemen are entitled to our respect, command our confidence and attract our admiration, it becomes the more necessary to weigh the doctrines they inculcate, because the higher the authority the greater the danger that inheres to errors of opinion, if such opinion leads to dangerous or fatal delays in the use of means, which if timely applied, would lead to happy results.

I know of no writer who expresses his opinions on this subject with more earnestness and candor than Dr. Thomas Watson, and think there is no one more completely at fault. After introducing the testimony of Dr. Armstrong, Dr. Gordon, Dr. Robert Lee and Mr. Robertson, to prove that puerperal fever is contagious, he adds, "indeed I believe that these cases of puerperal fever, occurring in succession to the same practitioner, are examples of something more than ordinary contagion, operating through the medium of a tainted atmosphere. I believe them to be instances of direct inoculation."

The learned professor is undoubtedly right in asserting that these cases are something more than the fruits of an ordinary contagion. But how the other part of his declaration is to be proved, we may perhaps see by and by more clearly.

M. Columbat de Lisère in his learned work on the diseases of females passes with unexpected brevity over the subject of puerperal peritonitis. "This form of peritonitis (to use his own language,) differs from the other kinds of peritonitis, only in the circumstance of its following the delivery of the woman, although the causes that give rise to it, are perhaps unknown, they appear to be absolutely local, and to be connected with the influences of a vitiated atmosphere, for in general such epidemics do not extend among females in the same city, nor among women inhabiting private houses, or among such as are in other hospitals."

The distinguished American editor (Dr. Meigs) of this work, does not endorse these opinions. He however occupies so much space in enforcing his views on the subject of treatment, that we do not get a full expression of his own sentiments, on this part of the subject.

Dr. H. G. Cary, to whom we have before referred, in speaking of the solicitude which awaited the confinement of females in his county, asserts that but one in the range of his acquaintance escaped. She took the precaution to secure the services of a neighboring physician, without the infected district and had a speedy "getting up." All, however who were attended during labor by practitioners under whose care most of the erysipelas came, died—in some instances as early as twelve hours after delivery."

This gentleman writes thus in continuation:—"Dr. Taylor of Carrolton resided six miles from the infected district, on the southeast, and visited it daily. At the same time he was engaged in a large obstetrical practice at home, yet not a single case of puerperal peritonitis occurred among his

patients during the prevalence of the epidemic. One case however was developed and proved fatal in his neighborhood. The patient was attended by a midwife on whose wrist there was a small scratch, which subsequently became erysipelatous."

The remarks of Dr. Gordon in relation to the spread of this disease by the attendant physician have already been introduced. In another place he states that "the midwives from Aberdeen carried the infection to the printfield, or great cotton works, two miles from town, where a great number of lying in women was affected, while at the same time, the women in the neighborhood, who were delivered by country widwives escaped."—These facts are regarded by him as a proof, that the cause of puerperal fever is special contagion, which within certain limitation is undoubtedly true.

Dr. Gooch mentions a remarkable instance, which he supposed an evidence that the disease may be carried by a third party, after having suspended his functions for a month, with the intention of allowing the contagion to die out or escape from his vestments and person.

Says Mr. White, "a gentleman whose veracity I can depend on, informs me that he attended a small lying-in hospital in London, in 1761; that they lost about twenty patients in the month of June; that he himself delivered six in a short time, and they all died; which so shocked him, that he desired the gentleman who had charge of the hospital to deliver some of those who should next be in labor, which he did, but they met with no better fate."

Believing that the epidemic character of this disease will have been fully established, by the contents of this paper, and being willing to concede, that in limited and close apartments it may become contagious, I deem it to be unnecessary to construct an argument to prove that it is not communicated by the touch of the attending physician.

The foregoing observations have been collated without regard to their chronological relations. The aim in bringing them together, has been to show that puerperal fever bears fixed affinities to other epidemic diseases, such as typhoid fever, erysipelas, scarlet fever and ulcerous sore throat, so that if either two or more of them are prevalent, the others will appear in the midst of them.

The practical advantages to be derived from the study of the affinities created by an epidemic influence, are very great. When there is a pervading type, in the maladies of a whole community, by attending to that,

rather than to the study of nosological distinctions almost without effort, we come to the adoption of general therapeutical rules, applicable to a majority of cases, and requiring only partial modifications to adapt them to specific symptoms. In this way, it becomes apparent to us, that there are widely extended causes concerned in the production of disease, and general rules by which their treatment may be regulated. The study of the one and the adaptation of the other, to the end designed, distinguishes the physician from the routine practitioner.

It is this study, this education of principle and application of it in practice which gives value to the writings of some of the farthers in medicine.

To pass from the consideration of authorities to the records of my own experience, I remark in the first place, that I had been more than twenty years in active professional life, before I had seen a case of epidemic puerperal fever, and that the first one which came under my notice, occurred in the city of Detroit, soon after an outbreak of erysipelas, appearing first among the U. S. Troops in 1841, then quartered in the public warehouse at the foot of Wayne street. During this twenty years, I had seen but three cases of metritis, succeeding parturition.

Case 1st. C——ss, a patient of one of my professional colleauges, was attacked with rigors twelve hours after the termination of labor. It ran its course with fearful rapidity, and became appalling from the early and profound asphyxia which ensued. It terminated fatally in forty eight hours, and the infant died immediately after, of erysipelas.

I shall make no attempt to transcribe the impression which this case left upon my mind. Though of transient duration, the traces left behind it are ineffaceable.

Case 2d. Of this I have no notes. The patient was a city pauper, which I was requested to see after her confinement, when the disease was fully developed. I remember now, that I was amazed at the external manifestation of erysipelas in the mother, by which she was carried off.—The infant died so soon after, from the same disease, that they were both buried in the same coffin.

Each succeeding year brought with it, some cases of erysipelas, but not sufficient in number, to create panic or cause public alarm, till the winter of 1848 and 1849, when an impulse was given to the spread of a tonic disease, by the prevalence in the city for several months of the spotted fever.—From that time to the present, every returning winter, has produced cases of typhoid fever, erysipelas, inflammatory croup, ulcerous sore throat,

metro-peritonitis, and malignant scarlet fever, but most numerous and fatal succeeding the cholera of 1849 and 1851.

There has been an obvious tendency, during the autumn of 1854, to the same grade of action in all our diseases, as ran through those which prevailed in preceding epidemic years.

Case 3d. Mrs. P——e. The husband of this person died of cholera, when she was two months advanced in pregnancy. The emotions occasioned by his death, caused uterine hæmorrhage to that degree, that I supposed the ovum to have been carried away. Subsequent events proved that, that had not taken place. At future returns of the monthly period, the flowing recurred. After quickening, these hæmorrhages ceased. By the seventh month she became feverish and breathed with difficulty. The abdomen was tender, and the movements of the foetus caused much pain. As the pulse was full, I took a few ounces of blood. It gave present, but not permanent relief. Being fearful of a repetition of the venesection, Mrs. P., did not let me know of the return of the symptoms, but suffered in silence, till after the eighth month was fulfilled, when she was attacked with dysentery, or rather with dreadful tormina and copious evacuations of gelatine and blood. Her intestinal suffering soon induced labor, which was so hurried that no assistance reached her, before the foetus and the placenta were both expelled.

The infant died of erysipelas, the second day after its birth, and the mother on the day following, in a state of decomposition, as proved by the sloughing of the cuticle of the loins, before she expired.

Case 4th. Mrs. B—— was taken with a severe chill about two weeks before the expected time of accouchment. As reaction came on, labor set in, which was so much hurried, that the infant was born before I had reached the house. The child died of erysipelas. The active symptoms in the mother's case were so far relieved by treatment, that a respite from their violence was found in the formation of two lumbar abscesses. There was something more than the effects of inoculation, I fancy in each of these cases.

Case 5th. Mrs. L——, was seized with violent chills when she supposed herself within two weeks of the end of her term. They were so protracted as well as severe, that congestion of the placenta took place and death of the foetus immediately ensued. For two days she had grinding and fruitless pains and was ultimately relieved by the application of forceps.

But the early attention given to this case chiefly with a view to prevent a recurrence of the rigors, for the protracted flowing which amounted almost to a hæmorrhage, for several days, I have no doubt that it would have become a case of peritonitis. With all the care bestowed upon it, there was an inflammation in one ovarium which continued more than a week.

Case 6th. Mrs. C——, at the end of the eighth month was taken with violent pain in the colon. The evacuations were liquid, slightly tinged with blood, but not attended with much tenesmus. The natural delicacy of this lady's health, together with her infinitesimal tendencies, prevented her obtaining all the relief she might otherwise have done, from these symptoms. She remained tolerably comfortable, till after her confinement. The day following this event, she had fever, and I also found that she had no control over the rectum or bladder. The latter symptoms I wished to impute to the pressure of the foetal head, as her pelvis was not spacious, particularly in its antero-posterior diameter. The appearances of dysentery soon increased and became alarming, but when I supposed my patient was in danger of sinking from that cause, she was unexpectedly relieved by the appearance of erysipelas in the parotid gland.

Lest it might be deemed possible that this case could be imputed to contagion, instead of recognizing as I do, in the symptoms that occurred at the eighth month the antecedents of the puerperal symptoms, I will here remark, that for four weeks, preceding the confinement of Mrs. C. I had attended no patient with puerperal fever but had waited upon eight others in whom no signs of such an attack had exhibited themselves.

Before I dismiss this part of the subject, I wish to mention two cases now under treatment, which tend to the same point we are contending for, the existence during gestation of the signs of approaching of puerperal fever and the blending of types in febrile diseases by an epidemic meteoration.

Case 7th. Mrs. C——, at the conclusion of her eighth month, had symptoms of dysentery. The pain was so severe that I apprehended the induction of premature labor. She obtained relief gradually, and after two weeks, was attacked with erysipelas at the ankle, which extended to the knee, and was suppurating freely at the time of her confinement, which took place a little prematurely. Her labor was not easy as those she had had formerly. There was more hæmorrhage and more excruciating after

pains. On the twentieth day, when the abscesses in the leg were nearly healed, the hepatic and intestinal disturbances were renewed, with the general symptoms of typhoid fever, but mild in character.

This lady, before her attack of dysentery had been some weeks occupied in nursing her elder children, who were suffering severely from a furunculoid eruption, with typhoid symptoms.

Case 8th. Mrs. W——, when at the commencement of her seventh month, took care of a relative, who was confined to his bed with typhoid fever, about fifteen days. She felt unwell from the time of the recovery of this person, but kept about, till the commencement of labor, which as she supposed, occurred a few days prematurely. The labor was rather favorable but followed by unusual uterine pains and the discharge of numerous coagula of blood. On the day succeeding her delivery, she had a chill with acute pain in the right ovarium. Her husband having been apprised of her apprehended liability to such an attack, was prompt in giving notice of its invasion. The imminence of the danger was apparently removed by the surpervention of an acute oedema of the whole surface, which was hot and sensitive to the touch. After this, the swelling amounted almost to hæmorrhage, and the urinary secretion became unnaturally copious. From this time, the symptoms all indicated approaching convalescence, except, the frequency of the pulse. This continued at about a hundred per minute till the end of the fourth week, when the case assumed nearly the aspect of typhoid fever. A few days subsequently this symptom disappeared on the breaking out of patches of purpura, such as have often appeared in our typhoid fever since 1851.

Having satisfied myself that the danger of propagating puerperal fever by inoculation is entirely chimerical, I took upon myself the responsibility and imposed upon my patient the hazard involved in the statement made in the following case.

Case 9th. Mrs. McL——, having been in perfect health during the whole of her period of gestation, was taken with the signs of labor on the morning of the 22d of December at 6 o'clock. I made the preliminary examination at 9. Finding no immediate indications of progress, I left the house, requesting to be sent for if the necessity should become more urgent, at any hour before evening. I received a message at 2 o'clock, just as I had got through with my round of visits at the Hospital and Pest House, where I had cases of typhoid fever, in all stages, from the beginning, to those putrid from bed-sores; one case of malignant erysipelas

involving the head and shoulders, and from fifteen to twenty cases of small pox, two of which were complicated with erysipelas. To all of these, I had given the requisite attention, examining them by sight, by touch and by smell. I obeyed the summons without making any special ablutions, or changes of raiment, except my outside coat, which I kept buttoned closely whilst in the pest house so as not to carry from thence, the atmosphere of the rooms, between my garments. At five o'clock I found it necessary to apply the forceps. After the birth of the child, the uterus contracted irregularly and retarded the delivery of the placenta. This obliged me to introduce the hand into the cavity of the uterus.

This labor was followed by no after-pains, by no fever, no abscesses in the breast, nor any other unpleasant symptom, either on the part of the mother or the child.

The foregoing details if only regarded as so many distinct items, and are looked at without discovering their morbid affinities, cannot awaken any particular interest in the mind of one, who simply listens to their recital. But if we discover the element of unity which permutes them, and trace the line of resemblance which binds them together, they teach us lessons of wisdom, practical in value, because we learn from them, that the right or the wrong appreciation of speculative subjects which involve the results of treatment, whether prophylactic or curative, include on many occasions, the question of life or death, to our patient.

Are there any who doubt the occurrence of puerperal fever as an epidemic? I apprehend not. Then why should astute, learned and practical men become oblivious to that fact, which sufficiently explains the reason of its ability to augment the number of its victims, and look, instead to the agency of a contagion or rather a virus, so circumscribed in its influence as that contemplated by Dr. Watson, between whom and some of the first minds in our own country, there are striking coincidences in opinion, on this subject.

We know that contagious diseases may become epidemic as has twice happened with the small pox since I have been upon the professional stage, when persons who had been in ordinary years sufficiently protected by vaccination, became the subjects of attack.

And we know too, that diseases which always break out as epidemics, may under extraordinary circumstances become contagious, as was the case with influenza in 1826.*

* In the spring of 1826, the influenza prevailed at Fort Brady. Sault de Ste. Marie, in a very

But in order to account for the propagation of a recognized epidemical disease, like puerperal fever in an infected district, I see no necessity for the introduction of a virus not cognizable by any of the senses. It would be more philosophical to admit its contagiousness without qualifications, when we should be authorized to look for it, at any time during gestation, or at any period subsequent to parturition.

If I have reached the point, I aimed at in the commencement of this paper, hereafter, more than heretofore, we may feel the responsibilities we assume in taking oversight of the health of females in a state of pregnancy. Death in child bed, interrupts the dearest and most delicate relations, and breaks the tenderest ties known to the human heart.

Those who have witnessed the joys which spring from the new relations established by the birth of an heir in expectation, to the inheritance of a rich and happy household; and then have seen the loveliest of the group, snatched by puerperal death from the happy scene, leaving an orphaned babe, a desolate husband, and despairing parents, need not to be reminded of the high responsibilities which surround the office of the physician.

If in the writing of this unpretending paper, I shall have removed any obstacles hitherto in the way of the successful performance of these duties and shall thereby have diminished the accountabilities of some of the younger members of the profession, my task will have been cheerfully performed.

DETROIT, January 1855.

ART. II.—*To the Editors of the Peninsular Journal of Medicine.*

JACKSON, December 18th, 1854.

GENTLEMEN,

I have recently had charge of a difficult and, to me, an exceedingly novel case of labor, and thinking perhaps it might be as interesting to others as it has been to me, and possibly by inviting attention to the peculiar features of the case, result in interchange of sentiments, and thus, ultimately, of general benefit to the Profession, I have ventured to com-

violent form. During its prevalence, Governor, now Sir George Simpson, of the Hudson's Bay Company, on his annual tour to the north and west, arrived at the Sault, in a bark canoe, propelled by Canadian voyagers, all in good health and encamped at the head of the rapids, on the British side of the River Ste. Marie. His crew were attacked with influenza.

I was informed afterwards, by the Honorable Angus Bethune, one of the chief factors of that Company, that during the subsequent part of this voyage, at whatever trading post the governor encamped, the influenza immediately followed him, of which many died.

municate it to you. If the case itself fails to interest some of larger experience than myself, perhaps the Medical Ethics evolved in its history may challenge attention and prove of ultimate value to the faculty, in prescribing rules and regulations for governing their intercourse.

Don't be alarmed now; I do not intend to, nor will I, involve either yourselves or the Journal, in a personal controversy.

I heartily detest the petty bickering and jealousies, that seem to be so peculiarly the faults of the Medical Profession. Still, you know, we are unable to remedy some forms of disease without laying them open to the view, in all their enormity and ugliness.

At about 10 P.M. of a December night, I was called to attend Mrs. —, in labor of her sixth child. Her age about 40. A strong, active, energetic, Irishwoman. Temperament:—Sanguineo-nervous, with sufficient of the bilious to give her an unyielding spirit; an untiring energy.

Having been fortunate in her previous labors, I found *her* cheerful and courageous. Labor had commenced two hours previous to my arrival. The urine had been discharged and the bowels opened. The labor was so urgent, I made an examination soon after my arrival. Found an immense *sac* of waters occupying the entire *pelvic cavity*.

As the *pain* subsided and the *sac* receded, I found that no portion of the child was within reach of the finger. I decided not to interfere with the *sac*, and in a short time it was ruptured spontaneously, and a very large aqueous discharge followed. After a short interval the labour continued most vigorously. Her position was a semi-horizontal one, on the edge of the bed, her limbs in charge of assistants. I was on her left side. I now made another examination and found that the right ear and side of the head presented at the *superior strait*. The *vertex* of course rested on the left *ilio-pectineal line*.

Having satisfied myself of the position, I determined to await the result of a couple of pains, hoping that it might be remedied by nature's unaided efforts. I soon discovered otherwise, however, and changing my position to the right side, during the next pain, introduced the hand sufficiently to reach the head, and as it subsided corrected the position without difficulty.

It was now the "*first order of natural presentation*," the face to the *right sacro-iliac junction*. In correcting the position it occurred to me that the head appeared very large, and exceedingly firm. At any rate, I was unable to detect the *posterior fontanelle*, and the anterior was beyond my reach.

Of this I am certain, that ossification was so far advanced that the sutures were unusually firm, and the fontanelles nearly obliterated.

The labor continued, the pains were regular and exceedingly vigorous, with short intervals, the head entered the *pelvic cavity*, and, I may say, *progressed*; but *oh*, — *how slowly*! I have myself traversed "*Nevada's frowning summi's*" and toiled the "*live long night*" o'er the trackless wastes of "*Carson's dreaded desert*," and thought the *end* would *never* come, but *never*, oh *never*, had I witnessed progress made so *slow* as *now*. It was six long and weary hours of vigorous, unrelenting labour, before the head became fairly engaged in the *superior strait*.— Two hours at least were occupied in its passage over the *sciatic nerve*, and never have I witnessed such cramp, spasm, and pain, as she experienced in her right limb. The only way she could be pacified during that time, was by constant, unremitted friction of the limb, over the line of the nerve.

Another peculiarity, was a most agonizing *pain* and *feeling of pressure* in the *rectum*. And I was obliged to apply and press with *all my might* a folded napkin, against the *anus* and *perineum*. At the commencement of each and every pain, her cry was "*quick, doctor*"—"crowd harder"—"*oh, I shall die if you don't press it stronger*."

After becoming nearly exhausted with the effort, I tried to dissuade her from it with the *argument* that it embarrassed the progress of the labor. But she would listen to no argument. Her *cries* and *screams* were loud and constant, until the demand was complied with.

The head was now, and had for two *long* hours, been engaged in the *inferior strait*. The *position* all *right*; the pains vigorous, almost beyond conception; and no progress.

Previous to this time, she repeatedly asked me "when she was a going to get through?" I had told her "I hoped she would keep me no longer than till the next day, as some of my other patients might find fault with her." *This*, for the time being, had pacified her. But now her demands became more urgent. She became nearly frantic. She was certain she ought to get through, as she *never* had *had* such *pains* in all her previous *labors*.

We tried her in an upright position, and on her knees; on her left side, and on her right. The result was the same. Her cries and lamentations were incessant, and truly heart-rending.

It was now six o'clock A.M. I sent the husband for *assistance*. Dr. A—— came with the instruments. Her labor continued in this same desperate frantic manner, until a few minutes before his arrival, when

all at once she said, "*its coming—I felt it give way here*"—referring to the epigastrium. "*The next pain will bring it.*" But the next pain never came.

"How strange I feel, doctor"—"raise me, I feel faint." She was raised up, some brandy and water given her, and she partially rallied. After a few minutes, she exclaimed—"Oh, what pain in my belly"—"see doctor, look here, how the child has gone down." Sure enough, the tumour made by the child's buttocks and limbs had fallen from between the epigastrium and umbilicus to between the latter and the symphysis pubis. The firmness and tension of the abdominal walls, so conspicuous before, was now all gone. Examination, "per vaginam," disclosed a slight hæmorrhage, and that the head had receded nearly beyond reach of the finger.

A deathly pallor overspread her features. Her pulse was but faintly distinguishable, and a clammy perspiration covered the surface. She made constant demands for something to relieve the "*pain in her belly.*" A small dose of morphia was administered, with brandy sling. The brandy distressed her, vomiting ensued, she could retain nothing. Water, teas, in short every thing was rejected. The pulse disappeared, not only from the wrist, but the most careful test of the humeral artery, could detect no pulsation. "*What was the matter?*" What could have produced this rapid sinking? My patient was manifestly dying, and now, what could be the cause of so sudden a collapse of the physical powers? Dr. A—— suggested the possibility of a laceration of the uterus or vagina. And upon a review of all the facts of the case, we agreed that we had abundant grounds to fear that such was the case. She still complained of the abdominal pain, and it was decided to apply cloths saturated with hot water to the abdomen, and give her another small dose of morphia. Dr. A—— administered it, and soon afterward she became more quiet. But no amendment of general condition followed.

Her breathing became frequent and labored. The house was soon filled with anxious female friends, who, of course, perceived that she was dying. And remembering that Dr. A—— had given her the morphia to quiet pain, he immediately got the entire credit of her present condition. Forcible delivery, at the expense of the child, was now proposed, as a last resort, based upon a mere possibility of thus saving the mother. But objections being made by some who have least at stake and most to say in times of trouble, and having ourselves but slender confidence in even that, we did not urge it. Urgent business made it necessary for the Dr. to leave about this time, and, as they became somewhat clamorous, it, of

course, became my duty to defend *him* and the *practice*. I stated to them our *apprehensions*, and undertook a lengthened explanation of the *reasons* that influenced our judgment. Did you ever undertake in a labored argument to *reach* the *understandings* of an *audience* of *Irishwomen*?— And if you should, where do you think you would direct your *batteries*? (Call at my office at any time hereafter, and I will advise you gratuitously.) I talked, and argued, and I defended, and while I was answering *one* question, forty others were forced upon, and driven into me; with the force of ninety pounders from Paixhan guns. I soon learned that “Jordan was a hard road to travel,” and that in reality I had undertaken an impossibility. They were clamorous that I should do something. I tried to convince them of the utter uselessness and impracticability of complying with their request; and they then demanded further professional assistance. Having *before this* discovered, that *I* had “lost caste” among them, by the unfortunate result of my late effort at *speech making*, I readily assented. “Send for any doctor you wish.” The next difficulty was, *who* should be sent for? Some were for Dr. B., some for Dr. C., and one or two for Dr. D. To pacify and reconcile *all*, I said, “*send for all.*”

The messenger was despatched, and as the “fates would have it,” none could be obtained but Dr. D., who upon a brief examination, thought he discovered the entire difficulty. “Ergot and brandy by enema would restore the pains, and reinstate the labor.” I gave him a minute history of the case, and endeavored faithfully to present the reasons we had for apprehending *laceration*. He seemed not to appreciate them, and expressed his entire confidence, founded on his experience in restoring the parturient efforts, with the means he had suggested; providing I would consent to his superintending its administration. I finally consented that he might try. He immediately despatched the husband for half a pound of ergot, (the druggist became alarmed, and would send but half the quantity,) and procuring an old *broken back* syringe, was prepared for *business*. Just about *now*, I “put out,” fully convinced that I must be very much needed some where else.

I returned in about two hours, and found the doctor very busy. He had, himself, administered injections, as he informed me, every ten minutes. Had produced some distress, but had failed to induce a return of the pains. Expected he would soon, however. Thought the countenance improved, there was no pulse, and the vomiting continued unabated. It was now about six P.M. I stayed until ten; and after informing the family that I could do nothing for her, I requested their consent to a “*post*

mortem" examination, so that I might be enabled, *not only* to satisfy my own mind, but theirs, of the *propriety* or *impropriety* of what I had done. But no, they should never consent to have her butchered. I left them. She died about four or five hours after.

I subsequently learned from my friend, Dr. D., that he had attended her "to the last," and that he alone, had had a *post mortem inspection*. Had found no rupture of the fundus, and did not examine lower down, Had by a labored effort succeeded in extricating the child from the pelvis. but had discovered no laceration, as he did not examine for any below the fundus. Had found a very large collection of blood in the uterus. Says I, "doctor, how did you come to have an examination of so important and interesting a case as this, without inviting in at least, one of the many physicians in town, who would have been so much gratified in witnessing and investigating it." His reply was, "there was so much feeling in the family against *all* of the *other physicians* in town, that he was satisfied it was useless to propose it." With this I close.

Sincerely yours,

TUNNICLIFF.

ART. III.—*Report on the treatment of Epidemic Dysentery, read before the Detroit Medical Society.*

Mr. President and Gentlemen of the Detroit Medical Society. The subject you have appointed your committee to report upon this evening is "What is the treatment of Epidemic Dysentery."

The best mode of treating special diseases has been the great desideratum of the professor of Medicine, from the days of the great Hippocrates to the present time; and although great changes and improvements have been made, yet when we look back we find that the grand principles upon which good treatment is based were not unknown in years long since gone by. A wide-spread field of therapeutic agents and a more extended knowledge of pathology has materially enlarged our views and given advantages our forefathers did not possess.

Your committee judge it a difficult matter to decide upon the best general mode to be pursued in the treatment of dysenteries, and will therefore report to you the many plans of treatment adopted by eminent

men of the past, and of the present, and will close by advancing our own special views on the subject.

The great Sydenham, after having attentively considered the various symptoms attending this disease during the epidemics of 1669, '70, '71 and '72, proceeds at length to the curative indications, and writes, "I discovered it to be a fever of its own kind, turned inwards upon the intestines, by means of which the hot and sharp humors that were contained and agitating the blood were thrown off by the meseraic arteries upon these parts whence blood was discharged by stool, the mouths of the vessels being opened by the impulse of the blood and the humors flowing thereto, and by the violent and frequent efforts of the intestines to discharge the sharp humors that continually ocillate them, the mucus wherewith there is naturally covered is cast out more or less copiously at every stool.

The indications of cure therefore seem to offer themselves plainly; nor indeed have I judged that I had anything more to do, than 1st, to make an immediate reversion of these sharp humors by bleeding, and afterwards to cool the remainder; and 2d, to evacuate them by purgatives. I therefore immediately direct bleeding from the arm, give an opiate the same evening, and the next morning my usual purging portion.

But if it proved so obstinate as not to give way to this treatment, I gave the opiate every morning and evening till it went quite off, and the more effectually to conquer it I have ventured to give xxv. drops of laudanum every eight hours, also a glister made of 1-2 pint of milk $\frac{3}{4}$ iss. of Venice treacle, to be injected every day, at the same time giving a diet of panada and sometimes of broth made of lean mutton. (The laudanum used by Sydenham was much stronger than the common laudanum of our shops.)

In the transactions of the American Medical Association are many articles upon the subject under consideration. Dr. Moniel Wyman, in his account of the dysentery of '47 and '48 as it prevailed in Cambridge, Mass., says: The treatment in the beginning of the epidemic was that which had heretofore been found successful, viz: a cathartic, evacuating the bowels freely, followed by an opiate taken alone or combined with ipecac, which with the opiate repeated on the following day, often put an end to the complaint.

Subsequently such treatment was found ineffectual, and various changes were made. Bleeding, both general and local, were resorted to, but the

results did not warrant their continuance. Emetics and cathartics almost uniformly increased the tenesmus and tormina, except in those cases not preceded by diarrhoea, when a cathartic at the commencement was found beneficial. In fine, the only drug that could be depended upon for relief from present suffering or for future cure was *opium*.

The treatment which was believed to be most successful was, in the main, as follows: A dose of castor oil was administered unless diarrhoea had preceded. After two or three evacuations, a full dose of opium, in some of its forms, was given sufficient to quiet pain. Opiate enemates when they could be found. The diet was farinaceous, in a fluid form, in the first of the disease, then, weak chicken broth and mutton tea. Stimulants were brandy and water, and especially bottled cider, was used when the febrile symptoms had subsided and the patient required support.

Although the narcotic treatment may not have arrested the disease, it is believed that under its influence the inflammation of the bowels was less severe and passed through its stages in a shorter time, and certainly with far less suffering to the patient.

In an interesting article in the Western Lancet of September 1848, Dr. Casselbury revives an old practice, viz: the use of saline and cooling medicines; instead of an opiate, he gives bi carbonate of soda, tartaric acid, and Rochelle salts, to allay the insupportable anguish which attends the disease, when the thirst is urgent and the gastric and intestinal irritation very great. He prescribes the effervescing draught every half hour until free alvine evacuations are produced. The action of the draught he has found most benign, allaying febrile symptoms, and at the same time relieving the sanguineous engorgement of the mucous membrane of the great bowels by serous exhalation.

By this treatment alone, in conjunction with opiate injections, he says, he has seen many cases cured. He believes it to be the most efficient mode he has witnessed in the malady.

Dr. Ganison, of Swedsboro, N. J., in vol. 2 of T. A. M. Ass., during the year 1848, says: "The dysentery prevailed among us quite extensively, and the treatment employed was bleeding, if the case was seen early and the pain and fever urgent. When bleeding was not required, and after its employment, a purge of calomel, x. grains, followed generally by castor oil, in some cases by Epsom salts; with mustard and warm applications over the bowels. Powders of ipecac and calomel were then

given, as much of the former as the stomach could bear, with 1-4, 1-2 or 1 grain of calomel every 2, 3, or 4 hours, according to circumstances, and potts. of opium grain 1, in a pill, were given often enough to quiet the pain, and if possible check the discharges; if there was much straining and tormina, injections of starch and laudanum were used, and in the latter stages blisters and astringents. (Acetate of lead was tried, but with no benefit. These cases all occurred in the month of July and August, excepting two in June and one in September.

Dr. Reynolds, of Gloucester, in his account of the dysentery of Cape Ann, says the most successful treatment of the disease was as follows: First, a cathartic was given; when free fecal discharges had been obtained half an ounce of the following mixture was given every two hours:

R̄ Mucilage gum Arab	℥ii.
Sugar	℥ss.
Kresote	gtt. xviii.
Tinc. of Camphor.	
Chloric ether	aa. ℥ss.
Water	℥ijj.

In some cases it was given every hour; and opium was given at night according to circumstances.

The treatment generally arrested the muco-sanguineous discharges, and the tormina within 24 hours, and convalescence at once commenced.

Dr. Lewis Slasser, of Canal, Fulton, Ohio, bears strong testimony to the value of nitrate of silver in an epidemic of dysentery at that place in 1849. The remedy was given in doses of gr. ss. combined with opium gr. ij. in piece, and repeated every 2 or 3 hours, in other cases in solution, with morphia enemas of a weak solution of the same were also employed.

Dr. J. W. Richardson, of Rutherford Co. Tenn., Dr. J. J. Thwealt, of Petersburg, Virginia, are equally in favor of arg-nitras in the form of injections in epidemic dysentery.

Professor D. L. McGagin, of the University of Iowa, remarks, with reference to the nitrate of silver plan of treatment: Injections of arg-nit in the proportion of 1 to 3 gr. to each and repeated is often attended with the happiest results. No one remedy will so successfully control the inflammation of the lower bowels. The writer adds, this may be used early in the disease, alternated with the acetate of lead and the tinc-

ture of opium, grs: x. of the former, and 3j. of the latter. He also advises, in cases in which ulcerations are suspected, the black wash as an injection. In 1850 dysentery followed close on the entering steps of the cholera, when opium carried to the point of relief quinine and the warm bath was found to be the most efficient.

The Committee on Practical Medicine of the A. M. Association, in commenting on the above, related plans of treatment with many other reports. In so far as the facts and opinions embraced in these communications are to be considered as supplying a data for an induction on the several conclusions, may be summed up as follows:

a. Depletion by bloodletting, cathartics, and the free use of mercurials are not required, but will be likely to do harm.

b. Opium, exhibited in decided doses, exerts a salutary influence in relieving painful symptoms and controlling the severity of the disease.

c. The nitrate of silver is a valuable remedy employed with a view to a local and general effect.

d. Tannic acid, and the acetate of lead, under circumstances denoting the propriety of astringents, are useful remedies.

e. To support the powers of the system by a timely resort to tonics, stimulants and alimentation, is an important end to be kept in view in the treatment.

In the report of epidemics of Tennessee and Kentucky for 1853, similar plans of treatment have been employed by the several physicians to those already reported, with the exception of Dr. Thompson, of Salisbury, Tennessee, who claims for the leaves of the peach tree the character of a sovereign remedy for dysentery. He directs a handful of the leaves to be infused in a pint of boiling water, to which a tea spoonful of laudanum and co grs. of alum are to be added. One-third of this to be used as an injection, to be repeated after every discharge. If the disease is of long standing he applies poultice of the leaves mixed with brandy to the abdomen and gives half a tea cup full of a weak tea of the leaves every hour or two. Constipation is obviated by small doses of salts.

In addition to the treatment of dysentery already read before you, we have examined that of many others, but our space would not allow of our transcribing them in this paper. We would state that they differ but little from those already recorded, more or less of the remedies being employed according to the nature of the epidemic, and the location of the same.

The plan of treatment found most beneficial* by the reporter since his connexion with the profession in this city, is as follows: If the disease has not been preceded by diarrhœa, I prescribe a large mercurial cathartic, deeming that the mildest in its results. After the evacuation of the bowels, I give olive oil \mathfrak{z} ss. laudanum 1 to ij. \mathfrak{z} x. according to the symptoms, diminishing the amount of laudanum at each successive dose; this I do every two or three hours as the case may be; generally, by the second day, the patient was very much better. If the case has been of some time standing, I prescribe in addition, a pill of

Ipecac,

Opium,

Acetate of lead aa. gr. 1-3.

which I administer every hour for four consecutive times, then once in four or five hours until all discharges have ceased. The patient is put on the most bland nourishment, deprivation of drink as much as possible, and perfect rest in the horizontal position.

As a general thing, the above plan is perfectly satisfactory, yet many cases arise which require more adjuvants and a modification, such as quinine, alkalies, stimulants, permanent and diffusible.

Injections I have seldom employed, as I have been led to believe that they irritate nearly as much as they soothe. Yet, if I thought that the rectum was the only part implicated, I should recommend an enema of starch and gum opii, or morphine in a small quantity.

But when we have diseases extending to the transverse and even the descending colon, I have but little faith in their employment.

I look upon opium as the great sheet anchor in dysentery, and although there are epidemics that require mercury, astringents and cathartics, yet this drug must enter in as one of the combinations. Moreover, the opiate, either as the crude gum or its tincture, I consider far more preferable than its salts.

‡ In many cases, and I would say as a general thing, warm applications applied externally, such as ginger or hot brandy poultices, tend very much to relieve the patient of the pain.

To sum the whole, the great aim and the first condition of cure must be to entirely control the muscular action of the bowels, so that the organ can be at perfect rest. The inflammation of the part can then be subdued

* I am indebted to Dr. Pitcher for the oil and laudanum plan of treatment, he having first suggested it to me.

and brought under control. Opium performs the first indication. Opium has a powerful influence over the second, and the olive oil is a tolerable good substitute for the natural secretion of the part to protect it, while healing, from extraneous substances. And, finally, I cannot close this report better than by quoting the sentiment expressed near 200 years since, by the great English physician, whose observations on the subject I have laid before you :

“And here I cannot but acknowledge with gratitude the mercy of Almighty God, the giver of all good, who has vouchsafed unto mankind in its manifold afflictions, opiates, no other remedy being equally powerful for the subduing of many diseases or for effectually extirpating them. Indeed so necessary is this excellent drug, in the hands of a skilful person, that the art of medicine would be truly halt and maimed without it. And yet, with it, he who understands its virtues shall bring about far more greater cures than might reasonably be hoped for with any single remedy.”

What improvements and progress has been made in the treatment of dysentery, from the days of Sydenham to those of the present, can be easily deduced. All of which is respectfully submitted.

WM. BRODIE, *Ch'm.*

Detroit, Nov. 2, 1854.

ART. IV.—*Mineral Acids in Nausea and Vomiting, during the period of pregnancy.*

OF the many diseases incident to the state of pregnancy in the human female, no one is more troublesome or a greater source of annoyance to the patient, friends, and physician, than nausea and its sequent, vomiting.

Not only does it manifest itself in the early stage of pregnancy, but continues even to the end, the last months being often more severe than the first, and in some cases does not manifest itself until the 8th or 9th month.

That its cause during the first stage of foetal existence is dependent upon and due to the sympathetic action of the gestative organ upon the stomach is evident, especially when we see that derangement of the digestive functions is a consequent of disease of the uterus from any cause whatever.

When it occurs during the latter stages, mechanical pressure or an over fullness of the genital system have been considered the exciting causes, and in many cases, if not in all, will account for the disease.

Torpidity of the bowels and the ingestion of indigestible food will also tend to produce it.

To relieve, and, if possible, to obviate this state of things, necessarily devolves upon the physician; and how often do the best directed efforts fail to bring about the desired results?

My attention has been directed to this subject from several patients coming under my charge afflicted with this disease.

In the spring of 1853, I was called to see Mrs. G., who was said to be nearly dead from long-continued vomiting. She was pregnant for the first time, and was then about eight months gone.

Deeming, upon examination, that the cause of the vomiting was mechanical pressure, I could promise her no relief, until it should take place by her confinement; but as she was suffering so much, and as no food, from the richest to the most bland, would remain in the stomach, I was induced to try what could be done for her. Each in its turn, I prescribed the usual remedies, with little, and sometimes with no benefit, and was about giving the case up as irremediable when I thought of the mineral acids; and making a weak solution of sulphuric acid and water, I gave it to her, with directions to use it every hour. She did so, and the first dose, in a measure, relieved her, and after a few doses she was enabled to retain some food. She was troubled but little afterwards, when, her confinement taking place, she entirely recovered. In August, of the present year, she was again in a similar situation as above related, when I treated her as before, but with no relief of the symptoms, till I administered the acids. This time I gave the nitric acid, diluted as above, with the same good results.

In October last, I was called to see Mrs. M., who, her husband informed me, could not live long unless something was speedily done for her, as she had been vomiting for nearly two months, and at the time was suffering from diarrhoea.

I found the woman emaciated to almost a skeleton. She was confined to her bed and unable to sit up, and could retain nothing whatever in the stomach. She was then, as she thought, about two months pregnant; and had not consulted a physician before because her neighbours had told her all women were so troubled; and being her first pregnancy, felt a delicacy in so doing.

I prescribed for her the dilute sulphuric acid, to which I added some morphine, to relieve the pain of the diarrhoea. She felt relieved after the first dose, and in a week was able to sit up, and soon entirely recovered. I have used it in several other cases, as have some of my medical friends, with the same beneficial results; nor have I as yet been disappointed.

ART. V.—*Case of Poisoning by Camphor.*

Mr. White, age about fifty years, generally healthy, of good habits, sanguine, nervous temperament, laborer, feeling slightly ill, swallowed from a bottle, about 7 A. M., what he supposed to be ordinary camphor spts, as kept in families, which however, was nearly a saturated alcoholic tincture. Taking a piece of cake to quiet the immediate irritation, he sat down a few moments, and then walked out without showing any unnatural sign. In about half an hour he sat down to breakfast, and had nearly made out his usual meal, when he was observed to stare vacantly for an instant, then attempt to call for water, and immediately become convulsed. In the first convulsion the attendants thought respiration was suspended full five minutes. I arrived at his side about ten minutes after the attack of convulsions. The volatile nature of the poison, and the fact that it had remained nearly alone in the stomach for thirty minutes, and the organ then filled with a pulaceous mass, offered no hope for the stomach pump. There was no smell of camphor preceptible from the mouth or breath. An attempt to administer an emetic was only productive of strangling from loss of power of deglutition. The breathing was slow, sterterous; pulse 98, and forcible; veins of forehead distended and tortuous; countenance livid, and covered with perspiration. Patient was sitting in a chair, supported. The "median basilic" vein of the right arm was opened, and about fl. 3 8 of blood ran tolerably free, when it ceased, and the "median cephalic" was opened, from which 2 or 3 3 fl more were drawn. He evinced sensibility to the lancet the last time, by jerking his hand, and sighing. The breathing seemed to improve, the countenance became less turgid, less tension of pulse, and about 80 pr. minute. Sinapisms had in the mean time been applied to the epigastrium, the feet had been immersed in warm water, and snow applied to the head. For ten or fifteen minutes this rate of pulse, respiration and general appearance continued, when he became slightly convulsed,

so that the feet could not be kept in the bath, and sinapisms were applied. The respiration now became slow and labored, pulse slower and feebler, face cool, and suffused with perspiration.

The pulse ran down within 20 minutes to 50. Dr. S. S. Cutter, who had arrived just after the venesection, suggested that if respiration and pulsation should cease, electro-galvanism might perpetuate the functions until the effect of the camphor was exhausted. I was accordingly absent about fifteen minutes to prepare for such an accident, but on returning found the pulse and breathing quickened, and violent convulsions racking his frame, in which opisthotonos was considerable,—the whole surface red with capillary congestion, the eye-balls injected and prominent for an instant, and then the eyes forcibly closed, loud moaning, grinding of teeth, and blowing of bloody saliva through the closed teeth. This continued about half an hour, when the opisthotonos gave place to rapid rolling over and over, now this and sometimes that way, burying the face sometimes for a moment in the bed, so that respiration was difficult. At this time I discovered a strong urinous smell from the patient, *which may*, however, have existed in his clothing before. No restraint was used; snow was kept on the head by a faithful attendant. After about twenty minutes this class of symptoms subsided, and he became quiet, breathing hard, but not stertorously. A free escape of “flatus,” *pér ani*, was now heard in evidence of relaxation of the sphincter, and entire loss of volition. Coma continued about three hours, when he became sensible to sounds, and half an hour after would peep from under his arm, when aroused, with a timid, half idiotic expression, and then cover his face as if afraid or ashamed.

I did not see him after this, (about 3½, P. M.). He sat up in a sleigh the next day and rode to his residence, about eight miles distant, but did not recover his memory until about thirty-six hours after taking the camphor, and has no recollection of anything which transpired after swallowing the draught. His friends thought his manners were not perfectly natural, and that he was unusually forgetful four or five days afterwards.

J. H. BEECH, M.D.

Coldwater, Mich., Dec. 16, 1854.

N.B.—In the treatment I should have used the pump to introduce an emetic if one had been at hand, but the messenger had called me to come in haste, and ran off without informing me of the nature of the case. It was sixty or seventy rods to my office, and no one but myself could get the pump, as the different parts had been separated for other purposes. Furthermore, I thought, and still believe, we should have been no better off

ART. VI.—*Abstract of Meteorological Observations made at the University of Michigan during the month of December, 1854. By A. Winchell, A. M., Professor of Physics and Civil Engineering.*

TABLE I. CLOUDS AND WINDS.

Direction.	CLOUDS.				WINDS.			
	7 A. M.	2 P. M.	9 P. M.	Resultant	7 A. M.	2 P. M.	9 P. M.	Resultant
	No. obs. Mean Veloc.	No. obs. Mean Veloc.	No. obs. Mean Veloc.	Total No. obs. Mean Veloc.	No. obs. Mean Force.	No. obs. Mean Force.	No. obs. Mean Force.	Total No. obs. Mean Force.
N.	3 4.00	5 3.00	1 4.00	9 3.44	3 3.33	2 2.50	1 4.00	6 3.17
N E.	2 2.50	1 3.00	0	3 2.67	1 1.00	1 4.00	0	2 4.00
E.	1 1.00	2 1.00	3 1.33	6 1.17	2 1.50	5 1.40	6 1.67	13 1.54
S E.	0	0	0	0	3 2.33	1 3.00	1 3.00	5 2.60
S.	2 2.00	1 2.00	1 2.00	4 2.00	3 2.33	3 2.00	4 3.25	10 2.60
S W.	3 1.33	6 2.17	3 2.33	12 2.00	8 2.62	10 2.70	7 2.29	25 2.56
W.	12 2.00	10 2.30	10 2.00	32 2.09	5 2.50	3 2.33	6 2.17	14 2.22
N W.	5 2.80	4 2.40	3 2.33	12 2.83	5 2.60	6 3.67	4 3.25	15 3.20
0	3	2	10	15	1	0	2	3
Monthly Mean	31 2.28	31 2.41	31 2.10	93 2.28	31 2.45	31 2.52	31 2.32	93 2.46

TABLE II.

TABLE III. STORMS.

Hour.	Barometer		Thermometer.	Mean Cloudiness.	Mean Humidity.	Cyclone.		Precipitation.			
	At 32 °	At sea lev.				No.	Commencement.	Duration.	Duration.	Am't.	Character.
	in.	in.				°	day.	hrs.	hrs.	in.	
7 A. M.	29.014	30.015	20 93	6.74	88.6	1	2d.	38	17	.434	Snow, 4 in.
2 P. M.	29.000	30.001	29.13	6.93	78.6	2	16th.	61	24	.235	Snow.
9 P. M.	29.028	30.029	23 39	5.52	85.0	3	21st.	72	11	.421	snow,rain,sleet
Month	29.014	30.015	24.48	6.40	84.1						rain.
						4	25th.	34	12	.166	Rain.
						5	27th.	48	15	.370	Rain, snow.
						6	29th.	58	0	.000	Cyclone un-
											completed.
								311	79	1.626	

TABLE IV. EXTREMES.

	Single Observation.				Mean of Entire Day.			
	7 A. M.	2 P. M.	9 P. M.	Month.	7 A. M.	2 P. M.	9 P. M.	Month.
	Day	Obs.	Day	Obs.	Day	Obs.	Day	Obs.
Maxima.								
Barom.	23	29.403	8	29.371	22	29.413	22	29.351
Therm.	15	38 °	25	44 °	14	38 °	25	44 °
Humid.	5	100	26	100	30	100	8	100
Minima.								
Barom.	3	28.407	6	28.377	6	28.510	6	28.377
Therm.	19	9 °	18	10 °	10	4 °	19	9 °
Humid.	9	73	13	58	9	52	15	63

NOTES.—Latitude 42° 16 min. N.; Longitude, 83° 44 min. W.; Elevation, 891 feet; Scales of Cloud Velocity, Force of Wind, and Cloudiness, 1 to 10; Scale of Humidity, 1 to 100. A Cyclone embraces a complete circuit of the surface winds through several stormy points of the compass to a point of settled weather.

ART. VII.—*Malposition of the Vena Cava.*

In the course of a dissection carried on by a class of students under my charge, I discovered the following abnormal arrangement. The sternum having been removed to expose the thoracic viscera, I proceeded to separate the layers of the mediastinum, for the purpose of exposing the veins and arteries to view. In pursuing this dissection the arch of the aorta, was laid bare with its great ascending branches, and across them transversely lay one of the venæ innaminatæ as usual. Following this to the right side of the aorta, I attempted to trace the vena cava down to the right auricle. After removing the fat to a considerable depth, no such vessel was to be found. Still thinking that it must be there, and that it would be exposed in the further progress, I left that part for the time, and beginning at the heart, began to trace the vessels outwards. The vena cava ascendens was in its usual place below. On the right side of the heart, I could trace the right pulmonary veins and artery, but no descending cava in front of them. Much perplexed, I began to query, whether it were possible that the cava had departed from its usual course and run behind these vessels. I therefore determined to raise the heart from its bed, dissect out all its vessels, and ascertain their positions before cutting them. I therefore turned to the left auricle, and tracing out from it, found what appeared to be three left pulmonary veins, the supernumerary one coming down from above. On tracing it out, however, it proved to be the vena cava transposed to the left side of the aorta. It passed down behind the left auricle, until it reached the auriculo—ventricular furrow, where it turned with a short curve and ran transversely to the right to gain the right auricle, which it enters precisely in the same manner and direction as the coronary vein usually does. There was no trace of a second cava on the right side of the aorta, as mentioned by Craveilhier. The vena ozyges terminated in the vena innominata.

X.

SELECTIONS.

New York American Medical Monthly.

An old Child at Birth.

[We extract from the Transactions of the N. Y. State Medical Society the following interesting case of extra-uterine conception, reported by Dr. William H. H. Parkhurst, of Herkimer. The old baby, with his baby-house, was exhibited at the last meeting of the State Society.]

Mrs. Eddy was married at the age of twenty years, in New Lebanon village, Columbia county, and with her husband, Amos Eddy, came in a very short time to the town of Frankfort, Herkimer county, where they both lived and died: he at the age of seventy, and she at the age of seventy-seven.

After they had been married for the space of seven years, she became pregnant, and the symptoms attending the early stages were nothing different from ordinary pregnancies. The catamenial secretion, which had always shown itself in a proper manner before this, and which made its appearance about the age of fourteen, now ceased, attended more or less with a fullness about the head, with nausea and occasional vomiting, and many other symptoms which usually accompany this important change of system. As the different months passed away, quickening, as it is termed, took place at the usual time, and after that, motions of the child were felt, and increased in strength during the remaining part of nine months, and, as she firmly stated, for many years after. As so many years had already passed since their marriage, and they had not been blessed with an *heir*, they both looked forward to the time when she should present to her husband an offspring, to crown each other with what they most desired. And in the expectation of all this, the necessary preparations were made, all the little fixings were selected and completed, and laid away in a careful manner for ready use; but like the to-morrow, the wished-for time never came.

At eight months and a half, while preparing a boiled dinner in a large kettle over the fire, the hook gave way suddenly, and the pot fell forcibly into the fire, upsetting and scattering the fire in all directions, and producing, as we might suppose upon the nervous system of a pregnant woman, a shock of surprise and consternation. In the space of two or three hours from this, labor-pains followed, and continued all the afternoon until evening, and with such regularity and force that her lady friend, who had been summoned to her assistance, advised sending for her phy-

sician, and Dr. Farwell, who lived in the town of Litchfield, (long since numbered among the dead), was sent for, and arrived in the fore part of the evening; after sitting awhile, he told her that he thought he would put her to bed in about three hours; but instead of the labor going on in a more determined manner, as time advanced, her pains began to diminish both in strength and frequency, and in the morning they had left her altogether, and the doctor went home with instructions to be sent for immediately when labor should again come up. The day passed, and she remained in a measure comfortable, and so on day after day, which was thought but little of from the fact the time for her confinement had not expired by two weeks. Mr. Eddy kept his horse up from pasture as a minute carrier, from the time the doctor left for the space of three weeks; and finding that the probabilities were no more favorable for his use than before, he turned his horse again to pasture. About this time Mrs. Eddy's health began to fail; anxieties, which before had been slight, increased; her physician was consulted with deep solicitude, and from day to day her case was carefully watched and prescribed for; each week that followed produced still more anxieties, not only with herself and friends, but with the physician. Already her health became so poor that she kept her bed altogether; her physician became alarmed, and believed that her case was not only enshrouded in much mystery, but that she could not survive long unless a favorable change was soon brought about; hence the views of different physicians were obtained, and a consultation of many of the most eminent medical gentlemen in the country were congregated together, such as Drs. Guiteau, Hull, and the older Coventry, of the city of Utica, and Dr. Joseph White, of Cherry Valley, &c., to deliberate more closely in her case. The result of this investigation led to nothing satisfactory; for no individual physician, nor the whole together, could diagnose the true nature of her condition, though all believed it to be some peculiar growth of the uterus; but none could believe it to be a child.

Month after month rolled away, and at the expiration of about one year and a half, after the most severe suffering, she began slowly to improve. During this time she became greatly emaciated, though her bulk of abdomen, which had been previously large, did not very much diminish. In a gradual manner she fully regained her health; and when she had so far recovered that she could travel around the country, she consulted very many physicians.

During the time that intervened between her recovery and the time of her death, she enjoyed the most perfect health, with the exception of occasional attacks of severe colic, and a spasmodic contraction of the abdominal muscles, somewhat similar to *travail*, which were often so violent that it required medical attendance to remedy the evil. For the first thirty years after her recovery she would often have these attacks, similar to labor, and call in her friends to advise for her, and sometimes would send for a physician. Many times it would require strong anti-spasmodic medicines to control the difficulty.

In stature she was about the middle size, but rather more athletic than

the medium. She would carry this burden and do the labor of any ordinary business, and endure it with perfect ease. She would walk, the summer previous to her death, when she was 76 years old, five miles, to our village and back, as quick as any girl at the age of twenty; and this she would do as often as every two weeks, in good weather.

One thing I have neglected to mention, and which, in a physiological point of view, is of some consequence in the history of this case; and that is, after she recovered her general health the uterus recovered its healthy function, its secretion became established, and continued in a regular healthy manner until the usual period of about forty-five, when it ceased in the usual gradual way.

There was nothing interesting connected with the postmortem examination worthy of remark, aside from the fact that a perfectly-formed child was found, weighing six pounds avoirdupois, and was removed in the presence of about twenty persons, mostly aged matrons. The position of the child was found with the occiput resting on and against the symphysis pubis, its face and front looking towards the spine of the mother, reclining a little on its left side, and lying a little to the right of the spine or median line of the abdomen. It had no adhesions or connections with the mother except to the *fallopian tubes*, and the blood vessels which nourished it, which blood vessels were given off from the mesenteric arteries.

This preparation, as is readily seen, is almost entirely enveloped in a firm, dense cartilage. The limbs and head, trunk, &c., are flexed and fixed, as it were, in a proper manner; and then, while in this condition, as though nature in reality looked for convenience in the long necessity for the future, had spread over this material, not only to tie up the extremities, to prevent occupying too large a space, but to form a smooth surface to avoid danger to the mother by lessening friction. The thighs are flexed close to the body, the leg and foot tight to the thigh, the arm flexed close to the body, the fore arm close to the arm, the elbow resting on the knee, the head thrown forward with its face entirely resting upon the sternum, with the hands resting upon the parietal protuberances. This cartilage envelopes the whole specimen like a canvas sack, fitting it in every irregularity. It seems to be formed in consecutive layers, like the grains of the growing tree. One leg and foot, and one elbow is enclosed, instead of cartilage, in an ossific or earthy deposit, upon the side which rested upon or near the spine of the mother. This cartilage, when first taken from the abdomen, was as white and smooth as white earthen. The blood vessels were some of them partly filled with blood.

This woman was born in the year 1775; married in 1795, making her 20 years of age; became pregnant in 1802, seven years after she was married; died in the year 1852; which time, being rightly computed, makes fifty years that she carried this foetus,

EDITORIAL.

To Subscribers.

We beg leave to say a word to delinquent subscribers—a very quiet word, viz: that it would be very convenient if they would pay up forthwith. We know that times are very tight, but they pinch us quite as much as they do other folks, and we need prompt payment.

Meeting of the State Medical Society.

Notice is hereby given that the third annual meeting of the Michigan State Medical Society will be held at Ann Arbor in the Medical College of the University at 12 o'clock, M., on Thursday the 29th day of March next. A general attendance of the physicians of the State is requested.

HENRY TAYLOR, M. D., *President,*

E. ANDREWS, M. D., *Secretary.*

We trust the above call will be responded to by a general assembling of all the physicians in the state, not imperatively detained at home by business. Already we hear from various quarters of many preparing to come, and we rejoice at it; but it is important that the meeting should be a *large* one. Let every one come that can possibly leave home, and let as many as possible prepare some paper to read, to add to the interest of the occasion.

The case of Dr. Beale the Philadelphia Dentist.

The review of the case of Dr. Beale, the dentist, contained in our last number, was written before we saw the opinions of our contemporaries generally of the medical press, and with only the facts of the case and

the opinions of Drs. Hartshorn and Stille before us. Since that time we have noticed a general concurrence expressed in our exchanges in the views of those gentlemen, and declarations in a vague way of the sentiment, that when ether is given unconsciousness is necessarily induced, and, that therefore no reliance can be placed upon the statements of a person under such influence. If Dr. B. was guilty as the Jury declared him to be, this was doubtless his impression also, but in this he was mistaken, and so are all those entertaining similar views. We have seen in all this flood of vague statement, not the slightest reason for modifying the declaration confirmed by the opinions of the ablest writers in the profession, that there is a stage of etherisation in which the moral sensibilities and appreciations are disturbed, and the powers of the will enfeebled and destroyed, while yet sensation and consciousness remain—and we are utterly astonished that among so many medical men this fact seems to be ignored. We have not attempted to decide with positiveness as to the guilt or innocence of the party in question—that is not our province, but we have attempted to decide upon the truth of some points as to the action of ether, and we must see something more argumentative and authoritative than we have yet discovered, to cause us to regard those decisions as incorrect.

A. B. P.

Viviporous Fish in Louisiana.

Bennett Dowler, M.D., who made the vivisections of the alligator in illustration of Mrs. Willard's theory of the motive power of the blood, has issued a sheet containing an account of a viviparous fish found in the New Orleans canal. The following extracts are from the paper, which we should mention, is credited to the New Orleans Medical and Surgical Journal.

NEW ORLEANS, Nov. 1, 1854.

“What have we here? A fish—a strange fish.”—*The Tempest*.

In the month of October, 1854, through the politeness of J. C. B. Harvey, M. D. of Thoupitoulas street, I received a small osseous fish, caught in the New Orleans canal, which connects the city with lake Pontchartrain. This fish had been placed in a basket containing crabs, one of which wounded it slightly in the abdomen near the cloaca, thereby exposing several foetal fish enveloped in a delicate membrane. The parent fish, which had been rudely thrust into a narrow mouthed phial of

spirits retains after immersion for two weeks, the original *rigor mortis*, and the same remark applies to the foetuses, though they have been soaked in water; some of them have been forcibly straightened. On the 17th of October, in the presence of, and assisted by Drs. J. Hale and M. Dowler, I enlarged the wound and proceeded to dissect a somewhat globular mass of foetuses bounded by the intestines before, and separated from them by an indescribably thin, diaphanous membrane; this mass was further bounded above by the spine and ribs, below and behind by the posterior inferior abdominal walls, bulging backward of the anal orifice and fin.—The exterior envelope of the oblong globe consisted of a very thin, pelucid, extremely delicate and apparently laminated and flocculent membrane, like the amnion of the human embryo in the early state; it did not form a simple sack, but consisted of many duplications like the arachnoidal reflections among the sinuosities and convolutions of the human brain, sending its prolongations as the hyaloid membrane does, through the vitreous mass of the eye.

This uterine membrane (ovisac it may not be termed) contained twenty two fishes. It is probable that the inner surface of the uterine membrane sent forth a still more delicate membrane which enveloped each fish after the manner that the peritoneum envelops the abdominal viscera; but the parent fish, and still more its inclosed organs, were too minute to admit of full demonstration during a necessarily hurried examination; moreover, the wish not to mutilate the parent fish very much prevented a fuller dissection of the foetal mass *in situ*.

Each foetal fish was doubled laterally, sometimes to the right, sometimes to the left, into the globular form, the caudal fin which is inclined to the lancet shape, though blunter, overlapped one eye and one side of the mouth; each fish *in situ*, and even after forcible extraction from its bed was infolded in a sack; some were drawn out united by pedicals to a common stem, somewhat like an umbilical cord.

These foetal fishes presented a perfect example of close packing. A perceptible force was required to dislodge them from their beds. The concavity left by their extraction appeared to be lined with a smooth, black, peritoneal membrane.

The intestines which are very minute were crowded forward by the rounded mass of foetuses which occupied the greater portion of the abdominal cavity. No ova were discovered.

The maternal fish not being much mutilated, is reserved for a more detailed technical description, which my leisure and the limits of this Journal will not admit of at present.

Without attempting fully to describe even the dermal skeleton, I may observe that this tiny fish is a most symmetrical one. Its minuteness may be imagined when I state that after the removal of the inclosed foetuses, it weighed only seven grains, though not disembowelled. Thorough desiccation would probably reduce its weight about half or more. The fish exposed for two hours in the shade on a damp day, was but slightly desiccated. It was weighed by Mr. Mackpherson, apothecary, in my presence; but fearing a mistake, I had it weighed a second time, with the

same result. If each foetus should weigh but one grain, the aggregate would be more than three times greater than that of the mother!

* * * * *

These foetuses are half an inch long, all alike, exactly resembling the maternal form and proportion, with the following slight exceptions, namely: their bodies are more slender and compressed laterally; their heads are comparatively larger, and their eyes more prominent; their colors are less variegated and paler; a greater difference appears in the middle of the abdomen, where there is attached to each foetus a whitish, faintly yellowish, placental-like irregularly formed mass of considerable size, having a broad base, being apparently implanted in or blended with the abdominal integument, possessing considerable strength, and constituting what may be termed the umbilical prominence; perhaps, it may turn out upon further examination that this mass may be not placental, but an adherent mesenteric mass of convoluted membrane.

These foetal fishes were probably sufficiently developed at the time of the parent's death to live independent of the mother.

It appears from the proceedings of the Academy of Natural Sciences of Philadelphia, for 1854, that Dr. Gibbons, of the Academy of Natural Sciences, of San Francisco, "claims priority of description of viviparous fish," in behalf of the gold-shimmering waters of California, and consequently, that State takes precedence over Louisiana."

Facts of this kind furnish a study of great interest to the embryologist, and Dr. Dowler has done well to communicate his discovery to the world. We cannot refrain however from feeling amused at the style in which it is expressed. Scientific men have been familiar with the phenomena of viviparous fish, for half a century at least, and they have a right to ask what he means by trumpeting forth such an old fact as something almost unheard of. He commences his article with a line of poetry expressive of his astonishment, and closes it with a plain intimation that the discovery of a similar phenomenon described by Dr. Gibbons in California, is the only thing of the kind ever announced before his own discovery. He says Dr. Gibbons of the Academy of Natural Sciences of San Francisco, claims priority of description of viviparous fish in behalf of the gold shimmering waters of California, and consequently that state takes precedence over Louisiana.

This is too ridiculous. Two scientific men in 1854, talking about "priority of description of the viviparous fish!" Why the books describing viviparous fishes were musty with age before California was even opened by the gold diggers. Besides numerous species in the genera *Blenius*, *Zoarchus*, and *Squalus* known by every one to be viviparous, there

are five species of the genera *Anableps*, and *Phœcilia*, expressly mentioned in Cuvier's Animal Kingdom as belonging to the rivers of America as long ago as 1831, (See Cuvier's Animal Kingdom, vol. ii. pp. 205) one of these species) *Phœcilia multilineata* was described in the Journal of the Academy of Natural Sciences of Philadelphia ten years earlier or in 1821. The idea of ignoring descriptions found in every respectable library and claiming "priority of description of viviparous fish" in the year 1854, is young America with a vengeance.

Some other points in the description are to be queried about. For instance Dr. D., says that after two weeks immersion in spirits the specimens "retained the original *rigor mortis*," *Query*. Is it easier to believe that the *rigor mortis* contained two weeks, or that the alcohol hardened the tissues of the fish as it always does when they are immersed in it?

Again with regard to the prominence upon the abdomen, looking like a placenta. Was it anything more than the vitelline sack which always occupies that position? It is proper to state, however, that some of the viviparous sharks have a sort of placenta, we are not aware that any other fish is known to possess one. Dr. Dowler does not mention any attachment of this organ, to the walls of the uterus, in such a way as to place it in contact with the maternal circulation, and consequently it is not possible to decide what its nature was.

We must commend Dr. D., for seizing upon and giving to the world an interesting fact, which most persons would have neglected to observe with care, but such observations should be put forth with more modesty and more deference to the rights of previous discoverers. E. A.

Notes of M. Bernard's Lectures on the Blood, with an Appendix,
by WALTER F. ATLEE, M. D., published by Lippencott, Grambo &
Co., Philadelphia.

This work consists principally of notes taken on Bernard's Lectures in Paris, by Walter Atlee, M. D. The appendix is a series of notes from the lectures of M. Robin. The whole is put forth with a very unassuming preface, that commends it at once to the scientific reader. Being a systematic treatise on the blood, it of course has much that is old in it, and also some things that are new. In short, it posts up the reader in all that is known of blood, down to the latest discoveries. Facts that

are but imperfectly known to the profession are here brought together in a small volume. He commences by considering the color of the blood. After stating the usual general facts, and also showing by vivisection that the blood returned from the kidneys is not dark like other venous blood, but red like the arterial, and that there is no difference in the color of the arterial and venous fluids of the foetus, he proceeds to the other physical properties. The most interesting portions of the work, are those which treat of the different qualities of the blood returned from different organs of the body. That returned by the renal veins is not only arterial in color, but destitute of fibrin; hence it is argued that the kidneys destroy the fibrin, and excrete its nitrogenous portions, and consequently that fibrin is not the material of nutrition, but a debris of worn out tissues to be excreted from the body, the nitrogenous parts by the kidneys, and the carbonaceous by the lungs. He proceeds next to examine the mesenteric veins. He asserts that these vessels absorb all the albuminous and saccharine principles that are received from the food, the function of the lacteals being solely and exclusively to absorb petty matters, and having no power to take up other kinds of nutriment. He then proceeds to examine the sugar-producing function of the liver. We fully posted up our readers on this discovery in a former number: at present, therefore, suffice it to say that on opening living animals and drawing blood from the portal vein, there is no sugar to be detected in it, unless saccharine matters are undergoing digestion in the intestines at the time, but if blood be drawn from the hepatic veins, or from the vena cava above the mouths of those veins, a large portion of sugar may be detected. This was the case in every instance, even after long and rigid abstinence from all saccharine and amylaceous food. From the liver, the sugar may be detected along the entire course of the venous blood until you reach the lungs, beyond which it cannot be found. The irresistible conclusion is that the liver-fabricates sugar out of the materials of the blood, and that the lungs consume it in respiration.

The appendix contains the latest discoveries in the microscopic anatomy of the blood and its vessels. On the whole we have not seen for a long time so great value in so small and modest a work.

Principles of Physiology designed for the use of Schools, Academies, Colleges, and the general reader. By C. COMSTOCK and R. N. CUMMINGS, M.D. Published by Samuel S. and William Wood, N. Y.

Those who are opposed to enlightening the common people on these topics, will groan of course to see this work, especially if it has a run as it ought to; but for our part we have always maintained that the people not only *will* but *ought* to be instructed on this and kindred topics, and that only as this is done, will the educated physician be properly and intelligently appreciated by the community; we are therefore, right glad to see this work come out to supplant the wretched trash heretofore offered the public.

It appears in the form of a neat quarto of about a hundred pages, with some two hundred engravings, many of them neatly colored. The organs and their physiology are treated in their natural connection and illustrated to a considerable extent by comparative anatomy. A praiseworthy trait in the work, is that it does not run off in the wake of any specialty or humbug, but is content to instruct in the plain great principles of the topics which it undertakes. In some parts there is a slight looseness and want of precision, but not to a very injurious extent. Not the least useful thing in it is the glossary of terms.

We hope it will drive out of use the trash now used in the schools.—It is the best popular work on the subject which we have ever seen.

For sale by A. B. Wood & Co., Ann Arbor, Mich.

E. A.

Diseases and Injuries of Seamen with remarks on their naval hygiene and the duties of Medical Officers by G. R. B. Horner, M.D., Surgeon U. S. N. Honorary Member of the Philadelphia Medical Society—Author of Medical Observations on the Mediterranean—The Medical Typography of Brazil and Uruguay, etc. Philadelphia; Lippincott, Grambo & Co. 1854.

The above is the title of a duodecimo volume of 250 pages on our table from the enterprising publishers. The work as its title would indicate, seems designed to afford information to those "who go in ships upon the great waters," respecting the preparation necessary to be made for diseases and accidents for long and perilous voyages, and the manner of treating them, &c. From the hasty examination we have been able to give the

work, we think it written by one familiar with the subject, and in a manner calculated by its clearness and precision, as well as fullness upon the points attempted to render it an important and valuable manual to all interested.

The work is illustrated by several plates executed in a commendable style.

Essays on Infant Therapeutics: to which are added Observations on Ergot; History of the Origin of the use of Mercury in Inflammatory Complaints; together with the Statistics of the Deaths from Poisoning in New York in the years 1841-2-3. By JOHN B. BECK, M.D. Prof. of Mat. Med. and Med. Jurisprudence in the College of Physicians and Surgeons of the University of the State of New York, &c., &c. Second Edition, enlarged and revised. New York: Samuel S. and William Wood, 261, Pearl street, 1855.

We are glad of an opportunity of calling the attention of our readers to this admirable little work—for a most valuable and admirable work it is—one which the interests of humanity will scarcely allow any physician to be without.

The portion of the work which causes us to use such strong language is the essays on infant therapeutics—a series of articles upon the effects of opium, emetics, mercury, blisters and sinapisms, and bloodletting on the young subject.

The first edition of these essays was published in 1849, and received the almost unqualified commendation of the Medical Press and Profession in this country and across the waters; and we have regarded it as one of the choicest little gems in our library ever since. We have taken occasion to read it again in its enlarged form and clearer type, with the result of having our former impressions of its excellence and usefulness as a book to place in the hands of the practitioner, particularly the young practitioner, revived and strengthened.

These papers are not so much marked by novelty of views or profundity of research, as for their superior common sense, and plain practical instruction. They point out with great perspicuity the modifications

which tender age produces in the effects of these active agents, and earnestly counsels caution and discrimination in their use. They supply a defect in most works upon therapeutics, and present the subject upon which they treat in a compact, convenient and attractive form.

The preparation of this edition for the press, and the addition of the new matter which it contains, was the last literary labour of the distinguished author. He says in the preface, the account of the cases of death by poisoning in New York has been introduced with two objects: to call the attention of the profession to the importance of having the office of coroner filled by a medical man, and to show the value of statistical reports of the cases coming under his notice—objects which we earnestly commend to the attention of our readers.

In conclusion, we would advise all young practitioners to read carefully this little book before they administer the active agents it describes to tender children.

MSCELLANEOUS.

Inhaling the vapor of iodine and its preparations, with or without kindred drugs, rendered volatile for the purpose, is now becoming in vogue for the relief of pulmonary diseases. The practice is only a revival of Pneumatic medicine as taught and tried centuries ago, then as now, however, too often empirically. The indiscriminate employment of inhalation is dangerous, and may prove speedily fatal, while a cautious selection of the cases by a competent diagnostician will show that there are examples of diseased lungs in which it may be safely and beneficially employed as auxiliary to other rational treatment. Physicians should give their attention to this subject, and keep inhalation out of the hands of the quacks, some of whom are making fortunes out of it, by advertising this ancient remedy as some new thing, and then treating all cases by the *month*, for a stipend payable in advance.—*New York Medical Journal*.

Dr. Horace Green, of this city, has lately been treating certain abscesses in the lungs by topical applications made directly to the walls of the cavity, by introducing his instruments, flexible catheters, through the bronchia, right or left, as the case may be, and whatever may be the final issue of his investigations, thus far he has met with no adverse symptom to discourage the practice, but the contrary, as we are informed by a medical eye-witness.—*Ib.*

Dr. Stephen Smith has been appointed to succeed Dr. J. O. Stone as attending Surgeon to Bellevue Hospital.—*Ib.*

The fashionable treatment of Cholera in England at present would seem to be Castor Oil in half-ounce doses every half hour. The experiment has been fatal in New York, in more than one instance to our knowledge, owing to the recommendation of this practice by our American newspapers, by which patients have been induced to rely upon it.—*Ib.*

HOMŒOPATHY IN TROUBLE.—We read in the *Gazette des Hopiteaux* for September 30th, that the public authorities of Marseilles, France, have visited the homœopathic drug stores, seized their preparations, and closed "the shops." They state as a reason for so doing, that the substances thus sold were not prepared according to the French pharmacopœia, and in the large majority careful chemical analysis was unable to detect the slightest quantity of the active principle pretended to be contained.—*New Orleans Medical News*.

The N. Y. Daily Times is out flat-footed in favor of female physicians and female apothecaries. Its articles are sensible and timely.—*Ib.*

Dr. Power, of this city, has recovered, a judgment for \$500 against one of the Rail Road Companies, for professional services to one of the victims

of their so-called accidents. So mote it be. Their cripples should be paid for until limbs and life are better cared for.—*Ib.*

Solidification of Cod-Liver Oil.—M. Stanislas Martin, pharmacist, Paris, gives the following process to make this oil palatable to patients:—Cod-liver oil, 125 grammes; spermaceti, 23 grammes (in summer, 20 grammes in winter); mix; heat over a sand-bath in a close vessel; pour into wide-mouthed vessels, and allow it to cool without shaking. An aromatic essential oil may be added. Cod-liver oil thus prepared looks like jelly. Mix with unleavened bread, gum, liquorice, or flour wet with sugar-water.—*Dublin Med. Press.*

A new method to extract Fish Bones from the Œsophagus.—We see tartar-emetic in sufficient doses to act, and then the whites of six eggs immediately swallowed, recommended in the Scientific American. The coagulation of the albumen and its ejection from the stomach will, it is thought, entangle the foreign body.—*Ib.*

Poisoned by Chloride of Zinc.—A case is mentioned in the London Lancet, in which an infant swallowed by mistake a solution of chloride of zinc. Dilute sulphuric acid in milk was prescribed, with the view of converting the salt to a sulphate, and it answered well—the little patient recovered.—*Ib.*

A Tight Bandage around the Thorax for Hiccough.—Dr. Upshur, in the Virginia Medical and Surgical Journal says:

“I desire to call attention to the method of relieving the hiccough, viz: by applying a bandage tightly around the lower part of thorax.—This symptom, so ominous of the sinking stage, and so exhausting in itself, depends upon spasm of the diaphragm, whose attachments are chiefly to the ribs and cartilages. If the bandage is drawn sufficiently tight, the muscle is so relaxed that the spasm ceases, as a matter of course. I have seen this simple method relieve this distressing symptom repeatedly, after every other remedy had failed, and I commend it, with great confidence, to the attention of the profession. It will also be found to be a valuable aid in the relief of some cases of chronic vomiting, not dependent upon organic disease of the stomach.—*Buffalo Medical Journal.*

American Doctors in the Russian Army.—We see the names of four or five American physicians going the rounds of the newspapers, who are said to hold commissions as surgeons in the Russian army. This may be true, notwithstanding our published opinion to the contrary.—*Ib.*

Injections of Arsenical Solution in Uterine Cancer.—The employment of arsenical injections to prevent the foeter of uterine cancer, is especially recommended by Mr. Lloyd of St. Bartholomew. He states that such treatment is much to be preferred to the ordinary disinfectants which are but of temporary benefit. The extraordinary influence of arsenical applications in cleaning cancerous ulcers, is well known. Some real good may result from their use, in addition to the prevention of foeter, since the diminution of discharge and sloughing will save the patient's powers, and possibly retard the cancerous growth.

Mr. Lloyd uses an injection of from two to eight grains of the white arsenic to the pint of water.—*Virginia Med. and Surg. Jour.*

THE
PENINSULAR
JOURNAL OF MEDICINE
AND THE COLLATERAL SCIENCES.

VOL. II.

MARCH, 1855.

NO. IX.

ORIGINAL COMMUNICATIONS.

ART. I.—*Homœopathy its Tenets and Tendencies, theoretical, theological and therapeutical.* By JAMES Y. SIMPSON, M.D., F.R.S.E., &c., &c. 1 vol. octavo.

Homœopathy fairly represented, a reply to Professor Simpson's "Homœopathy" misrepresented. By WILLIAM HENDERSON, M.D., &c. 1 vol. octavo.

THE first American editions of the above works have recently been issued by Lindsay & Blackiston of Philadelphia. The volumes have been on our table for several weeks, waiting our leisure to notice them, which we could not well do until we found time to read them carefully through; this we have done, and we now predict that if Messrs. Lindsay and Blackiston have not published a large edition, a second issue will soon be required, for these books open up some strange developments in the progress of human nature, which may be studied with advantage by the medico-professional, as well as by the non-medico-professional philosopher. There is food here that will delight the spiritualist — there are calculations that the ablest mathematicians may dwell upon until they are bewildered amid the abstractions of numbers—there is matter for the

lovers of the marvelous; for the wit, who delights in keen-edged repartee that cuts like the polished cimeter of the Solden of Egypt, and for him who admires the solid retort, that cleaves its way like the good broadsword of King Richard the Lion-hearted of old England. What! all this in two medical books? Precisely, — and more than we have time even to hint at.

Dr. Simpson is a man of mark in the profession, and Dr. Henderson has hitherto occupied a respectable position. Dr. S. contends that Homœopathy is nothing, medically considered. This has aroused the ire of Dr. H., who insists that there is nothing of medicine but Homœopathy. And thereupon the two gentlemen fall to belaboring each other most lustily, on professional points, to the no small amusement of the non-medical public; but, as we cannot doubt, to the final establishment of the truth.

In this controversy, “where doctors differ, who shall decide?” We answer, Time.—Time will remove error from the depths of public opinion as certainly as that error, the product of human imperfection, of credulity and ignorance, will constantly bubble up from those depths and disappear, like froth upon the ocean, before the waves of Time.

Let us see how it works. It is but a few years since that, ignorant pretender, Thompson, revived the dogma that as “Heat is Life and Cold is Death” all diseases originate in cold, and infallibly tend to produce “canker,” which can only be prevented or cured by heat applied in the forms of hot emetics, hot injections and the hottest kind of stimulants, aided by steaming hot sweats. The friends of simple medical theory and still more simple medical practice were deluged to their heart’s-content with villainous decoctions, from a single ounce to a thirty ounce degree of potency, which they swallowed with martyr-like patience under the impression that a theory so simple in detail, so easily comprehended and so uniform in results must be true. They were told that the emetics uncovered the “canker” and brought up the coating or “cold phlegm.” While the sweats purified the blood by divesting it of the “canker poison” the stimulants increased the heat, and thus enabled the life-principle to heal the disease. The patients were told that the minerals used by regular physicians were poisons and highly dangerous; no matter how carefully used, they would rot out the bones; and they were also told that to abstract blood under any circumstances would inevitably shorten life, precisely in proportion to the quantity abstracted. On the other

hand the Thompsonians solemnly declared that as their medicines were exclusively vegetable they were perfectly safe, and the doses being wisely proportioned to the amount of "canker" in the system, relief must follow, as certainly as that an effect must follow from a cause. We are not speaking of a thing that prevailed here and there in a few obscure and benighted corners of our country. Thousands advocated this practice and tens of thousands submitted themselves to the treatment. In every State of the Union, in every county, city or hamlet, the imposing sign of the "Steam Doctor" was paraded alongside of that of the veritable M.D. Our [neighboring state, Ohio, at one time, literally swarmed with the practitioners of this system.

Unfortunately for the longevity of Thomsonianism people at last discovered that the practice was so certain and effectual, that not only the diseases, but the patients rapidly disappeared. The practice seemed to anticipate the final destruction of the world by fire. Wherever its followers came there was immediate combustion,—heat, smoke, and steam ascending from the domestic altars, like propitiatory offerings to an offended deity amid the groanings of the par-boiled victims, who were steamed, dosed and injected until, like Bancho's ghost, "their bones were marrowless."

Had this "simple medical practice" prevailed universally for a few years, the only memorials of the human race scattered over our vast solitudes would have been human bones, sweating machinery, glyster-pipes, and packages of capsicum and lobelia.

Fortunately for the variety of the *genus homo*, called by Carlyle "gullible bipeds," an effectual barrier against this threatened general combustion, was discovered by Priesnitz, the coldwater man, of the Hartz mountains, as rude and illiterate as Thompson, but none the less qualified on that account, to invent and practice a theory still more simple than that of his brother of the west, the steam doctor. Priesnitz assured the world that cold water was the natural, the only remedy for all diseases—that it had soldered up his badly broken ribs—cured cholera, small pox, consumption and all kinds of sickness. That it washed out all impurities ("dreck") from the body, and left it as clean and healthy, and as free from disease, inside and out, as a fresh and blooming ("kint") baby. Amid the deluge of cold water poured down and over our mortal bodies by the indefatigable followers of the mighty genius of the Hartz mountains, the hot combustible process of Thompson was effectually extinguished.

The extremes had met—water conquered fire—cold subdued heat.—People were washed who never before had been washed. For once every body was clean. Very good. Not content however, with this they continued to wash and soak, and rub and scrub the delicate texture that God has provided for the protection of the interior organs, until every particle of the oleageinous matter designed for the lubrication of the skin was removed as fast as secreted. What followed? The skin incessantly chafed, irritated and deprived of its natural lubricant rebelled, and at last closed up its “safety-valves,” against the exit of insensible perspiration. Nature struggling under the pressure of the imprisoned fluids, but still true to herself, endeavored to establish artificial outlets, in place of those so rudely closed. As a consequence great boils appeared over the surface of the body, involving a vast amount of sub-cutaneous tissue which were triumphantly hailed by the water doctors as the “crisis of the disease”—a crisis indeed! under which the afflicted sufferer was ready to exclaim, even without the consolation of ancient Simeon, “Lord, now lettest thou thy servant depart in peace.”

Human nature soon revolted against the extreme of the Priesnitz practice—it was too uncomfortable, and too uncongenial to the instincts of man, to be long and patiently endured. It might, however, have retained its short lived popularity somewhat longer had not the empire of popular credulity been partially occupied by still another system of theory and practice, the very antipodes of those we have named. We allude, of course to Hahneman’s system—“*similia similibus curantur*” with his circle of infinitesimals and magical dynamization. Thompson and Priesnitz, treated their patients as though they were so many armed fortresses against which a whole broadside of destructive missiles, or a deluge of cold water could be hurled with impunity. Hahneman treated his, as though they were mythical personages requiring mythical remedies, in place of material bodies demanding material remedies. Hence his theory of “dynamization,” which is the perfection of his ideal in medicine, and which even staggers the credulity of Dr. Henderson, who with all his veneration for Hahneman, acknowledges that his idea of *dynamization* by friction and shaking a mere hypothesis and has no kind or measure of likelihood in its favor (page 259.) But is this dogma of Hahneman’s so frankly declared absurd by his zealous disciple, more improbable than that his attenuated doses, even up to the thirtieth dilution, produce effects? Hahneman gravely states “that it holds good and will continue to hold good, as a

homœopathic thereapeutic maxim, not to be refuted by any experience in the world, that the best dose of the properly selected remedy is always the very smallest one in one of the high *dynamization*, X (or the 30th dilution) as well for chronic, as acute diseases. That the most noted modern Homœopathists recommend not only the 30th but infinitely higher dilutions will appear from a paragraph of a reported discussion from the "Homœopathic Journal," quoted by Simpson, page 292. "Dr Beilby of Glasgow spoke of having used successfully, the 800th dilution of hemlock. Dr. Moore mentioned having employed beneficially the 100th dilution of phosphorus." Dr. Henderson said, "that all dilutions from 30 downwards, will produce an effect seems to be established by the experience of all." In corroboration of this opinion, Dr. Henderson gives us an example in the volume before us, (page 264) as follows: "A gentleman, seventy-five years old, had for many years, (fifteen or sixteen,) been afflicted with a scaly eruption on the legs, on a dark dusky redness of the skin—it occasionally improved, but never disappeared, and had been for five months in a very bad state, when he was ordered *sepica of the thirtieth attenuation*. Having taken one dose, he became affected in the course of the day, with so great a sense of exhaustion, as to be unfit for any exertion, and so to alarm his family that he had stimulants administered, and the medicine forthwith stopped, *never to be resumed*. In a week, a sensible amendment was observable in the limbs, in a month the redness was gone, and nothing remained of the eruption, but a white and furfuraceous disquamation, which gradually disappeared also. When seen and examined four years afterwards, the skin was ascertained to have remained perfectly well."

As this case was inserted in Dr. Henderson's book, to prove the falsity of Dr. Simpson's charge, that the infinitesimal doses produce no effect whatever, we may fairly conclude that he has here presented the most favorable example, within his experience, of the activity of a Homœopathic dose of the 30th attenuation. But before we can credit the assumption of Dr. Henderson, that the single dose of *sepia* produced the effects he ascribes to its action, we must know more of the history of the patient. We must know whether he had been addicted to the free use of strong coffee, tobacco, opium, wine or, what most of the aged sons of old Scotia love better than all, hot whiskey punch concocted from the "mountain dew." We must know whether he habitually indulged his appetite for rich and highly seasoned food, or other indigestible substances—whether

in fact, like Capt. Dalgetty, he was over fond of "provant." Now when the doctor directed the dose of sepia, if, as is likely he also directed abstinence from all, or any of these things, depriving the old gentleman of his accustomed stimulants, we can account for the "sense of exhaustion" which occurred in the "course of the day," without blaming the sepia, and *which was relieved by stimulants*. Again, after the sense of exhaustion subsided, did not the doctor still persist in laying down, perhaps, a more cautious, but decided plan of dietetics for his patient? We have a right to believe that he did, as all respectable Homœopathists have the credit of cautiously regulating the diet of their patients, proscribing, very particularly, coffee, salt, etc. If such was the fact, and we have no doubt of it, we can understand why the old gentleman was some better in a week, without the agency of medicine. And if the doctor succeeded in correcting the bad habits of his patients—(nearly all chronic diseases, are continued by bad habits,) gradually substituting water for hot whiskey punch, &c., and a plain simple diet in place of rich, highly seasoned, and particularly highly salted food, we hazard nothing in saying that in less than a month, there was a great improvement in his digestive organs, and as a consequence, a more healthy condition of the entire fluids and solids of the body. Nature, thus relieved of the daily burden of casting off loads of improper food and drinks, in obedience to an infallible physiological law well known to every physician, found leisure to set about curing the old gentleman's legs. We have repeatedly met with cases of temporary exhaustion in elderly persons from causes apparently slight; nervous action, at times, is easily disturbed. And we have also known the local diseases of such persons, skin particularly, to yield very steadily to the influence of dietetics alone.

Dr. Henderson's patient *took but one dose*; had he repeated the medicine again and again, and witnessed the same depressing effect after each repetition of it, in the absence of any other known cause for the exhaustion, his case would have presented a different aspect. As it is, knowing what the "30th dilution" of a drug means, we are warranted in the conclusion that the single dose of sepia had no more effect in the case of the "old gentleman" than a drop of water.

We may have devoted more space to an analysis of this case than its merits would seem to demand. But as Professor Henderson, from his position stands forth as one of the great lights in homœopathy, if not the very greatest in Europe, we have quoted the case as a fair sample of the

testimony by which the highest living authority on the subject, endeavors to establish the superiority of homœopathic attentions, and, in this instance, particularly of the 30th dilution.

But few really know the actual amount of medicine contained in the 30th homœopathic dilution, and we regret that Dr. Henderson, in connection with his case, has followed the custom of homœopathic writers generally, and has not enlightened his non-professional friends on the subject. The thirtieth dilution "consists of a decillionth of a grain, or a decillionth of a drop of the drug, whatever drug that may be which is employed."

Lake Superior is a considerable body of water, and if one grain of sepia (the pigment of the cuttle-fish) was uniformly mixed with the entire liquid in that lake, we might reasonably suppose that the sepia would be pretty well diluted, sufficiently so at least, as not to be suspected of producing any very alarming effects, when a few drops from this vast medicated lake was administered to a "gentleman seventy-five years old for a scaly eruption of the legs."

But that would be a *highly concentrated dose*, compared with the "30th dilution" which, according to Dr. Simpson, whose calculations are not disputed by Dr. Henderson "consists of a decillionth of a grain of the drug used; or, in other words, of a minute globule of sugar moistened by being simply dipt in a drop out of an ocean of fluid one hundred and forty billions (or 140,000,000,000,000) times as large as our whole planetary system," and this also, is an *alarming concentrated dose* compared with the 100th dilution used beneficially by Dr. Moore" or the 800th dilution used successfully" by Dr. Beilby of Glasgow! Surely these are mythical remedies, adapted solely to mythical personages.

Old Ben Jonson may have given Hahnemanan approximation to his idea of the marvelous potency of infinitesimal dilutions, as we find in his "alchemist" the following:—

" 'Tis the secret
Of nature naturized 'gainst all infections,
Cures all diseases, coming of all causes;
A month's grief in a day; a year's in twelve;
And of what age soever, in a month:
Past all the doses of your drugging doctors,—
By taking *once a week*, on a knife's point,
The quantity of a grain of mustard of it,
I'll undertake withal, to fright the plague
Out o' the kingdom in three months."

In order that the truth of these statements may be fully understood,

and that they may not be regarded as ridiculous misrepresentations of the "dilutions," we must be indulged in a demonstration drawn from the mode in which the dilutions are effected as given by Hahneman himself.

In the "Organon," second American edition, page 200, is the following, to which we call special attention :

"If two drops of a mixture of equal parts of alcohol and the recent juice of any medicinal plant be diluted with 98 drops of alcohol in a vial capable of containing 130 drops, (for the convenience of shaking) and the whole twice shaken together, the medicine becomes exalted in energy to the first development of power, or, as it may be denominated, the first potency. The process is to be continued through 29 additional vials, each of equal capacity with the first, and each containing 99 drops of alcohol, so that every successive vial after the first, being furnished with one drop from the vial or dilution immediately preceding (which had just been twice shaken), is, in its turn, to be shaken twice, remembering to number the dilution of each vial upon the cork as the operation proceeds. These manipulations are to be conducted thus through all the vials, from the first up to the 30th, or decillionth development of powers, which is the one in most general use."

To this he adds in a note insisting upon the importance of giving but "two shakes for every vial," as more "shakes would develop the energy of the medicine to too great a degree." He then adds, on the same page, "All other medicinal substances (that is all solids), except sulphur, * * one and all were, in the first place, exalted in energy by attenuation in the form of powder by means of trituration in a mortar, (in sugar) to the third, or millionth degree. Of this one grain was then dissolved and brought through 27 vials by a process similar to that employed in the case of vegetable juices, up to the 30th development of power."

On page 207 he says, "The best mode of administration is to make use of small globules of sugar the size of mustard seed; one of these globules having imbibed the medicine, and being introduced into a vehicle, forms a dose containing about the 300th part of a drop of the dilution, for 300 of such globules will imbibe one drop of alcohol; by placing one of these on the tongue, and not drinking anything after it, &c. But if the patient is very sensitive, and it is necessary to employ the smallest dose possible, and attain at the same time the most speedy results, it will be sufficient to let him smell once."

Having given the basis in the language of the author of the system

In the first dilution of one grain of the medicine with 99 of sugar or alcohol, one grain contains $\frac{1}{100}$ of a grain of the medicine. In the second dilution, a grain or drop will contain $\frac{1}{100}$ part of $\frac{1}{100}$, which is $\frac{1}{10,000}$ part of a grain. The third dilution containing $\frac{1}{100}$ of the second, which is $\frac{1}{1,000,000}$ part. The fourth $\frac{1}{100}$ part of the third which is $\frac{1}{100,000,000}$. The fifth $\frac{1}{10,000,000,000}$. The sixth $\frac{1}{1,000,000,000,000}$ of a grain and this is immeasurably beyond in minuteness the power of any chemistry to detect, any microscope to show, or any imagination distinctly to conceive: but the diminution goes on in this rapid ratio up to the 30th degree—the denominator being multiplied each time by 100—every successive degree 100 times smaller than the preceding, till at the thirtieth, a unit with 60 ciphers for a denominator, and a unit for a numerator expresses the quantity of medicine, or the part of a grain which is contained in a drop. This is the fraction:

[illegible]

We may, perhaps, get a more distinct impression, or at least a nearer approximation to an impression of the minuteness of these dilutions, by taking another view, calculating from data already given, and which any arithmetician can verify, the quantity of fluid required to dilute completely a grain of medicine.

It will be observed that in the process of preparing the medicine, only an infinitely small portion of the original grain is finally used. All the intermediate dilutions between the first and thirtieth, or the one used, are thrown away. We cannot here do better than to quote from the able little work of Dr. Worthington Hooker, of Connecticut, on Homœopathy, a work we would be glad to see in the hands of all interested in this subject. He says: "Let us see what quantity of liquid would be required for the successive dilution of a grain of medicine, if instead of throwing away 99 parts out of every 100 the whole is retained and ultimately elaborated. For the first dilution 100 drops of alcohol would be used.

For the second it would take 100 times as many, which is 10,000, or about one pint. For the third 100 pints. The fourth 10,000. And now it mounts up rapidly at each dilution. For the ninth dilution it would require ten billion of gallons, which, according to computation, equals the water in lake Agnano, which is twelve miles in circumference. For the twelfth dilution a million of such lakes would be required, or, as it is calculated by Dr. Post, of New York, it would require five hundred lakes as large as lake Superior. The fifteenth dilution would require a quantity of alcohol greater in bulk than the earth. The eighteenth would require a quantity greater than the volume of the sun. And the thirtieth, the one which Hahneman insists upon as being the best for common use, would take a quantity of alcohol exceeding the volume of a quadrillion of suns."

In connection with this view, knowing, as we do, its truthfulness as a picture of homœopathy—and how carefully modern homœopathic practitioners exclude from the people the extent of these absurdities, we can but regard the men who practice this deception in a light, which, considering the class of persons that are found to patronise and sustain them, it would be considered by some impolite and discourteous for us to designate.

When we say to a layman that at the thirtieth dilution a whole grain of medicine would require a body of alcohol much larger than the whole solar system, to prepare it we are met with a book, if not an expression of denial; and feel that our reputation either for truth or candor suffers in his estimation in a decided manner. When shall we be able to show these things to the people? When will they cease to imagine so vain a thing?

Does any one ask why homœopathy still clings to these absurd infinitesimals when the world of nature abounds with well known medical agents of unquestionable efficacy, and which may be administered with safety in rational and appreciable doses? We answer, that homœopathy is chained down within a magic circle, by the supposed law of its founder, that "like cures like"—"*similia similibus curantur*" beyond which it cannot pass. Break through the misty veil of "spiritualism" that enshrouds it—let in the clear light of day, and it will vanish like a dream of the night. No one knew this better than Hahneman, who, at a very early period of his investigations discovered that medicines in appreciable doses, too frequently produced symptoms that disproved his theory.

Hence he steadily diluted his remedies until he carried up his delusions to a point where he was satisfied that the officious medicine would not interfere with his homœopathic law, or, what was better, with the restorative powers of nature. That he succeeded in this, is evident, when he came to the grave conclusion that the best dose for an acute or chronic disease, either for swallowing, or simply smelling, is a decillionth of a grain,—“or in other words the swallowing or smelling only, of a dry globule of sugar formally dipped in a drop out of an ocean millions and millions and millions of times larger than all the oceans of the earth, and medicated by only one single grain of the appropriate drug being dissolved in this enormous sea.” *Simpson, page 155.*

Thus we perceive that homœopathy must stand or fall with the infinitesimals. Remove this feature from the system—administer medicines in accordance with the homœopathic law, of *sufficient strength to produce a positive effect*, and the whole errors of the system will be apparent.

We will not say that Dr. Henderson believes this; we are not the keeper of any man's conscience; but we do say that the following passage is a strange commentary on his previous declaration of faith in the homœopathic law. “The amount of allopathic medicine which I would retain for occasional though unfrequent employment in curable diseases is *an aperient, chiefly a tea-spoonful of castor-oil*. As to ancient appliances that are not properly medicines, do not consist of medicines in the proper sense, I would reserve my right to employ *heat and cold* as I think best, and speaking for myself personally I would also regard myself at liberty and without forfeiting my title to the honor of being a homœopathic physician to facilitate the action of my homœopathic remedies by *local abstraction of blood in some acute cases*.”

Here Dr. Henderson acknowledges that he means to use certain old fashioned allopathic remedies. As “*aperients*”—what kind or how many he does not say, chiefly, however, *castor oil*. He will also use *hot and cold* applications, which as we have seen, in the hands of Thompson and Priessnitz were formidable remedies, and, in acute diseases *he will also abstract blood, locally*. Very good—we have not the least objection. With the aid of certain allopathic aperients, the local abstraction of blood, the judicious use of warm and cooling applications, and a very cautiously regulated diet, we can readily believe that Dr. Henderson, and all other Homœopathists who retain this list, will cure many diseases. But what, in the mean time, becomes of the homœopathic law and the infinitesimals?

We have thus briefly alluded to three distinct theories and forms of practice that, at different periods during the last quarter of a century, have been paraded before the public with all the assurance of realities.—It is unnecessary to dwell upon either, as most medical men are familiar with their pretensions. All of them have had their special advocates and admirers and each in turn has struggled to supplant the other; and what is the upshot of the whole? Thompsonianism has ceased to exist. Hydropathy has left the plains and valleys, and gone to the hills and mountains in search of pure air and active exercise; and homœopathy has called in the aid of “antiquated allopathy” to prescribe for this exceedingly refined and delicate off-shoot of ancient medicine “a tea-spoonful of castor oil, cooling or warming applications to the head or feet, the abstraction of a few ounces of blood, and a rigid diet.” These are all special theories—exclusive systems, cramped and bound down at best to a few appliances and to specific modes; and when wandering from their respective limits, they become self contradictory and their characters are lost; whereas, legitimate medicine surveys the whole field of nature, listens to suggestions from every department of science, considers all means and all modes, but bound to none, limited in nothing, is at full liberty to use whatever agents will relieve suffering humanity, whether these agencies be mental or physical, ponderable or imponderable; from the vegetable, the animal or the mineral kingdoms; in large doses or small, concentrated or diluted—in short to do anything or nothing, as reason and experience may indicate and guide. While the former, like floating islands, rise upon the surface flourish their brief day, are broken asunder and buried beneath the waves, true medicine like the firm continent receives the fragments and incorporates whatever is substantial into her bosom; and though changing in some of her features, and varying with time, still, resting upon the everlasting foundations of nature, shall remain when all systems are forgotten and lost.

ART. II.—*To the Editors of the Peninsular Journal of Medicine.*

GENTLEMEN,

My partners, Drs. McKay and Dare, and myself, not long since found a case of preternatural labor which we are disposed to think worthy of the

notice of the profession. The patient is an Irish woman, about 40 years old and weighing some 145 pounds. It was her fourth pregnancy.

At 11 o'clock, A.M., Dr. Dare reached the bed-side and found a child weighing seven pounds in her bed, still unsevered from its uterine connection. It had been born five hours;—cried lustily on the admission of the cool air upon its surface. There was no pulsation in the *funis umbilicalis*. The patient had previously, on similar occasions, “done so well,” that the parties did not think of summoning a medical attendant, but upon waiting for the expulsion of the placenta in order to remove the child, they found the pains became more and more severe without the desired effect. After disposing of the infant, upon examination, Dr. Dare found the right arm of another child presenting, the hand and half the fore-arm delivered. The body was lying across the pelvis the head to the right side of the mother. At 1 o'clock P.M. Dr. McKay and myself were at the bed-side;—we found the pains regular and very forcible—no change in the condition of things had been effected since the 1st examination by Dr. Dare. The case was a plain one—we had only the choice of three expedients,—version, evisceration or reliance on the expulsive efforts of the uterus to deliver the child double. We chose the first. We believed the child to be dead. After long continued efforts the hand was introduced into the uterus, but from the tremendous contractile efforts which were increased in frequency by the motions of the hand, it became almost completely paralyzed. The feet could not be reached sufficiently to grasp them though the finger could be hooked over the thigh at about its middle. But even there it could accomplish nothing—it was powerless. No effort consistent with the integrity of the uterus could effect a change in the presentation. The hand was withdrawn:—the patient got up, walked to the fire, stood and warmed her back and feet during the intervals of pain. We then determined to bleed her freely and make another effort at version; about 20 oz. of blood were drawn with very little tendency to syncope—she was immediately put into the position for turning, when it was found the shoulder was descending in the vagina. It was now half past 2 o'clock P.M. In 15 minutes more the breech presented at the os-externum,—the inferior extremities were then brought down, and shoulders and head soon followed, by slight traction, with the face to the perineum. In 5 minutes more the placenta was expelled and the uterus contracted down into the pelvis. The placenta was single, or rather the two were so united that no examination of the maternal surface would

have given rise to a suspicion of a plural origin. The two chords were attached near the centre, about an inch apart with the membranous walls of the two sacs about midway between them.

On our visit to the patient next day at 11 o'clock A.M. she was found sitting upon a stool by the fire,—said she felt quite comfortable—"last night felt some sore where you took the child from me, but this morning it's all gone in." Not since heard from. I omitted to state in its proper place that the child was dead and was a boy about the size of the first one, which was also a boy.

This was an extraordinary case, the ratio of frequency of which, according to Douglas, is as 1 to 10,000.

It is one of Denman's cases of "spontaneous evolution." Not Denman however, but Douglas explained the mechanism of the labor as observed by us. The circumstances which favored this unusual event were, as in all similar cases, "a relative disproportion of the foetus and pelvis," and an extraordinary contractile power of the uterus. This disproportion in the case under consideration, arose chiefly from the more than average capacity of the pelvis, as the foetus was near the average size.

WILSON HOBBS.

ANNAPOLIS, INDIANA, Feb. 4th, 1855.

ART. III.—*To the Editors of the Peninsular Journal of Medicine.*

I have been induced, from the perusal of almost every number of your Journal, to doubt the soundness of that philosophy which teaches us to combine opiates or astringents, or both, with starch, or other mucilage, to be used as injections to check pains in, or discharges from, the bowels. The practise appears so inconsistent with sound sense, that the frequent failures to accomplish the desired result are not matters of marvel. In an active practise of over twenty-five years, I have never had occasion to resort to it. My treatment has been, invariably, to use *laudanum* in warm water, when the mucous coat of the intestines was not so irritable as to forbid it; in which case a *decoction* of opium has always answered the intention. When the benefit of astringents is desirable, if united with

the tinct. or decoction, the most happy result is obtained. "A cat with gloves on cannot catch mice."

I did not intend to write an article for the Journal, but to furnish a hint for your better judgments and abler pens.

Truly yours,

I. W. B., M.D.

ART. IV. *Review of the Report of the Committee on the Epidemics of Ohio, Indiana, and Michigan, to the American Medical Association.*

This report was drawn up by Geo. Mendenhall, M.D., assisted by Prof. Z. Pitcher and Prof. Allen of Michigan, N. Johnson M.D., of Indiana, and D. Tilden, M.D., of Ohio, with contributions from many other gentlemen.

Commencing with Ohio, the topography and geology of the State is detailed. The dividing line, which separates the waters which flow to lake Erie from those which fall into the Ohio river, commences on the Pennsylvania line, about 30 miles south of the lake, at an elevation of 1,100 feet, and descends as it departs to the south-west. The State is thus divided into two slopes, a northern and a southern. These water sheds are cut into ravines and valleys by the rivers leaving hills and table lands between. The high and dry lands are free from malarious fevers, but those which are wet, and especially the newly cleared regions are subject remittents and intermittents. The submerging of wet lands for the purpose of forming artificial ponds and lakes, had the effect, contrary to popular apprehension, of putting a stop to malarious exhalations. The report from Montgomery Co. is accompanied by a valuable map, showing the geological formations by colors, and the outlines of the tracts occupied by various epidemics. By inspection of this map, no connection can be traced between the geologic formations and the epidemics, except perhaps a slight tendency in the latter to extend themselves along the water courses; but this may result from the greater density of population in these places. Such maps, made with care and kept on record, may be of the utmost value in studying the laws of disease: but they should be so contrived, by shading or otherwise, as to show the relative density of population in the different parts, otherwise much of its information is use-

less. It is to be noticed on this map that in every instance the cholera epidemics spreads over a tract small and nearly circular in form, with a town in the centre. It seems, also, that epidemics return frequently to the same locality. Thus, the town of Dayton is marked with no less than six, whose boundaries are all nearly parallel to each other; but how much of this is to be attributed to the increased chances of sickness in a locality where there are more people to be sick, it is difficult to say, because the map does not show the relative density of population. An epidemic tendency in a very sparsely settled section, might find but three or four persons prepared to fall its victims, and so never be noticed, but if it light upon a flourishing town like Dayton, and seize the same proportion of inhabitants, the very accumulation of numbers makes a great show, and it is marked down as a "great epidemic." Hence, in marking the outlines of these visitations, it is important to note the population at the time living on the ground.

Indiana.—This State, according to the report, has no particular dividing line separating it into two slopes like Ohio. It has numerous rivers which terminate in the Ohio river and the lakes. Near their mouths they form deep vallies which thoroughly drain the country, rendering it dry and healthy; but inland, and higher up where the streams have their origin, the deep vallies do not occur, hence the land is not so well drained, and the highest part of the State is the wettest. In these parts malarious fevers are prevalent. There appears to have been no epidemics during the year of any great interest.

Michigan.—The report of this State is imperfect, some excellent reports being given for particular localities, while the State in general is omitted — doubtless from negligence of our physicians to furnish the committee with information. It may be well, therefore, to speak a few words on the general geological structure of the State. Michigan consists of two peninsulas. The southern one is embraced between lake Huron and lake Michigan. It consists of mingled tracts of timber and oak openings. The centre of the peninsula is moderately elevated, showing two slopes, one to the east and the other to the west. The rocks beneath it however, dip in the opposite direction — that is, the rocks at the east side of the State dip downwards to the west, while those at the western border dip to the east. The most of the country rests on the silurian limestones, but a few counties in the centre rest on the coal formation

The whole is overlaid with drift. The rocks beneath the drift have no perceptible effect on health in any way, but the water which percolates through the former is strongly impregnated with soluble sulphates and carbonates, rendering it very hard, and this has been supposed to aggravate cholera in certain localities. The waters, however, of the great rivers and lakes which form the boundaries of the peninsula, are exceedingly pure and soft, (see analysis of Prof. Douglass in a former number). The following report of the diseases of Detroit was drawn up by Prof. Pitcher:

TO GEORGE MENDENHALL, M.D., *Chairman, etc.*:

DEAR SIR — In preparing this short and unsystematic report, which includes a notice of the diseases that have at any time within the last two years been sufficiently prevalent to be entitled to notice as epidemics, my object has been to convey such an idea of their general character, as well as of their relation individually to a predominant or pervading type, as when studied in connection with the meteorology of the period, may ultimately lead to the discovery of some general laws affecting their periodical return, and the establishment of some important general rules for mitigating their violence and diminishing their malignancy and ratio of mortality. You need not, therefore, look for such a critical analysis of the individual cases, as if I were laboring to establish some favorite pathological notion, or to show the propriety of making a doubted nosological distinction.

The observations herein submitted, relate alone to the city of Detroit, now supposed to contain about forty thousand inhabitants. It is built upon a fresh water deposit, of sufficient elevation above the river to admit of good drainage, which is secured by sewers, now rapidly being extended through the city. The inhabitants of Detroit are supplied with water from the river, elevated by means of steam power, and distributed through the city in cast-iron pipes and wooden and leaden connections. Its purity, absolute and relative, is shown by the analysis of Prof. Silas H. Douglass, of the University of Michigan, an extract from which you will find appended to this report.

The meteorological abstract for the years 1852 and 1853, which is also annexed, has been obligingly furnished by the Rev. George Duffield, D.D.; whose observations on the atmospheric changes of this place are made in conformity to the requirements of the Smithsonian Institution.

I gave you, in 1852, some account of a violent form of disease which made its appearance here in the winter of 1847 and 1848, and expended its force upon the cerebro-spinal meninges, and seemed, from the time of its advent to the date of that communication, to have given character to the diseases occurring within these dates. It is referred to now, for the purpose of showing that the same atmospheric diathesis, producing similar modifications in disease, still exists, and requires unwonted modes of treating disease.

In making my schedule for each month, I have purposely excluded all those forms of disease which were not sensibly affected by, or did not originate from, the epidemic constitution of the air.

I have adapted the following arrangement, in order that the brief notes which I propose to insert from month to month, may be seen directly in connection with the cases to which they refer, and therefore more likely to be read and remarked upon by others.

Schedule of Diseases prevalent in Detroit from January, 1852, to December 31st, 1853.

JANUARY, 1852.

Œdema of the Glottis.	Erysipelas.
Puerperal Fever.	Typhoid Fever.
Pneumonia Typhoides.	Laryngismus.

The cases recorded under the name of œdema of the glottis, have originated as follows:

E. B., two and a-half years, not known to have been specially exposed, although the weather was intensely cold at the time, complained of a sense of coldness and of fatigue through the day. At night fever came on, the child grew hoarse, and showed some signs of pain on making the effort to swallow. The throat on examination was found to be red, but not much swelled. The skin was congested and red about the neck and chest, so that the friends were apprehensive of scarlet fever. The cough was croupy, and the respiration stridulous and audible. Forty-eight hours after, the glottis was nearly closed and the child in a state of asphyxia, although we used calomel, antimony, leeches, and counter-irritation with great assiduity. At this time, we commenced the use of nitrate of silver in a solution containing $\mathfrak{z}\text{i}$, $\mathfrak{z}\text{i}$. of water, which was applied freely and frequently for more than two days, not only to the fauces but down the œsophagus opposite the cartillages of the larynx. This, with a persistent application of our constitutional remedies, carried our little patient safely through.

I saw no case of puerperal fever this month in which there were not indications of its approach, before or at the time of parturition. Careful observation, I feel confident, will establish the fact that the disease is an epidemic, sometimes the cause of the premature labor, and at others excited into action by incidents of childbirth.

Mrs. B——, after a natural and easy labor, had a mild attack of puerperal fever, which expended its force upon the colon, causing bloody stools, which looked like the expressed juice of the berries of the *Phytolacca decandria*. Her infant was attacked with erysipelas, and died of gangrene of the scrotum; and an older child died of œdema of the glottis,—the symptoms and history similar to those of little E. B., whose case is described above.

FEBRUARY, 1852.

Uterine Phlebitis.	Typhoid Fever.
Laryngitis.	Typhoid Pneumonia.
Erysipelas.	Puerperal Fever.
Laryngismus.	

Scarcely any difference was observable between the diseases of January and February of this year.

MARCH, 1852.

Erysipelas.	Typhoid Fever.
Laryngitis (with Typhoid symptoms).	Puerperal Fever (with Erysipelas).

In this month, we have had modifications of the same general or elementary form of disease. Sometimes it seems to have been proper to give prominence to the local affection; and in conformity to such usage, I have called a case an erysipelas or a laryngitis, when others might, and perhaps with more propriety, have called them both typhoid fever, of which the erysipelas and laryngitis were local manifestations. The fact that these local affections, as well as the constitutional symptoms were amenable to the influence of quinine, opium, &c., will certainly go far to justify that generalization.

APRIL, 1852.

Puerperal Fever.	Dysentery.
Tonsilitis.	Erysipelas.
Typhoid Fever.	Cholera. (last day of the month.)

Towards the close of this month there were a few hot days, which changed the local affections, but not the general character of disease.

The cases of puerperal fever seen this month, were all preceded by a chill at the commencement of labor, and attended by afterpains of uncommon severity. The cholera case, as we had but one in April, is reported as an indication of the approach of that scourge. It occurred in an infant six months old, whose mother was suffering from puerperal anemia, which may have been the predisposing cause.

MAY, 1852.

Puerperal Fever.	Dysentery.	Typhoid Fever.
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Nothing specially to distinguish the diseases of May from those of April.

JUNE, 1852.

Typhoid Fever.	Dysentery.	Cholera.
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Typhoid fever is becoming less frequent, and cholera and dysentery are taking its place, all exhibiting the same atonic character.

Dysentery.
Typhoid Fever.

Cholera Infantum.
Laryngitis.

Cholera.

I give the following history of one of the cases of dysentery treated this month, for the purpose of showing the relations which symptoms supposed ordinarily to be the signs of widely distinct diseases, may be made to bear to each other during the existence of a pervading epidemic influence.

Mrs. McR——y, at the eighth month of her gestation, was taken with symptoms analogous to both cholera and dysentery, having the intestinal cramps of the one, and the tenesmus and bloody evacuation of the other. The feeble state of arterial action deterred me from taking blood. She obtained some relief from the use of blue pill and opium, when she was prematurely delivered. The day after the birth of her infant, she had a violent chill, and died on the third, of puerperal peritonitis, and her babe about the same time, of erysipelas.

Children taken with cholera infantum sank with remarkable rapidity. Being mostly instances of pure gastro-duodenitis, without the copious evacuations of Asiatic cholera, they soon passed into a state of collapse, and died, closely simulating the Oriental epidemic.

AUGUST, 1852.

Cholera.
Remittent Fever.
Typhoid Fever.

Dysentery.
Erysipelas.
Cholera Infantum.

At this time the cases of remittent fever and dysentery, if not successfully managed, would in a few days pass into a state scarcely to be distinguished from Asiatic cholera by their external aspect. Madame C——'s case furnishes an illustration. She was seized with rigors on the 12th. A violent hot stage ensued, accompanied with nausea, but not attended by arterial reaction. On the recurrence of the chill and succeeding paroxysm of fever, diarrhoea set in, which ended in profound collapse on the fourth day, when she expired.

Some of the cases of dysentery were attended in the latter stages by parotitis.

SEPTEMBER, 1852.

Cholera.
Dysentery.
Remittent Fever.

Erysipelas.
Puerperal Fever.
Laryngismus.

Scarcely any variation in the symptoms of the diseases which occurred in September could be perceived during the month of October. Every thing generically related to cholera, showed a disposition in the latter stages to run into it.

OCTOBER, 1852.

Typhoid Fever.	Typhoid Pneumonia.
Dysentery.	Erysipelas.
Neuralgia.	Cholera.

Our last cases of indigenous cholera occurred this month. They were not numerous, but nearly all fatal, no matter what method of treatment was pursued. The only one, out of hospital, in which I was able to establish a permanent reaction, was followed by a protracted typhoid fever, with symptoms of gastro-duodenitis, and very unlike the instances of arachnitis to which we gave the name of consecutive fever in 1832 and 1834.

NOVEMBER, 1852.

Diarrhoea.	Laryngitis.
Typhoid Fever.	Dysentery.
Erysipelas.	Gastro-duodenitis (collapsing without diarrhoea).

As the weather became colder, cholera subsided; and in its place, and apparently intermediate to cholera on the one hand and typhoid fever on the other, we saw numerous instances of gastro-duodenitis, bearing a good deal of resemblance to yellow fever, which would terminate fatally on the second or third day, and when relieved by appropriate treatment, would exhibit many of the symptoms of typhoid fever, and linger indefinitely.

Postmortem examinations made of these cases showed that the duodenum and the colon were chiefly implicated. The same remark was applicable to some of the October cases of cholera.

DECEMBER, 1852.

Dysentery.	Erysipelas.
Laryngitis.	Scarlet Fever.
Typhoid Fever.	Pharyngitis.

The reduction in atmospheric temperature incident to the season of the year, caused an increase in the number of cases of pharyngeal and laryngeal inflammation. During this, as during the eleven preceding months of the year, it appeared as though the *vis medicatrix naturæ* of Cullen had become a fiction or figment of the brain, so strikingly have the recuperative powers of the system been paralyzed by the agents producing the various forms of disease incident to the year.

As the season advanced, cases of typhoid fever increased, and in certain instances proved to be decidedly contagious. Others were attended by hæmorrhages from the uterus, of a dangerous character; another class were scarcely to be distinguished from scarlatina, whilst a distinct set very closely simulated purpura hæmorrhagica.

JANUARY, 1853.

Pharyngitis.	Dysentery.
Typhoid Fever.	Laryngitis and
Neuralgia. (The sequel often of	Laryngismus. (Relieved by
Influenza.)	quinine and brandy.)

FEBRUARY.

Rheumatism.	Erysipelas.
Influenza.	Laryngitis.
Neuralgia.	Dysentery.
Typhoid fever (followed by a peculiar form of ophthalmia.)	Dengue.

MARCH.

Influenza.	Dengue.
Erysipelas.	Laryngitis.
Neuralgia.	Puerperal Fever. (Some cases fatal.)

APRIL.

Laryngitis.	Bronchitis.
Typhoid Fever.	Duodenitis.
Erysipelas.	Influenza.
Pleuritis.	Neuralgia.

MAY.

Dysentery.	Erysipelas.
Laryngitis.	Diarrhoea.
Gastritis.	Bronchitis.
Typhoid Fever.	Influenza.
Intermittent Fever.	Neuralgia.

JUNE.

Diarrhoea.	Dysentery.
Neuralgia.	Duodenitis. (Fatal in children as cholera.)
	Erysipelas.

JULY.

Dysentery.	Gastritis.
Puerperal Fever. (Infant dying of Erysipelas.)	Typhoid Fever
Diarrhoea.	Remittent Fever
	Neuralgia.
	Cholera morbus.

AUGUST.

Dysentery.	Bronchitis.
Typhoid Fever.	Remittent Fever.
Diarrhoea (from hepatic congestion.)	Intermittent Fever.
Rheumatism.	Erysipelas.
	Laryngitis.

SEPTEMBER.

Diarrhoea. (Hepatic congestion.)	Bronchitis.
Remittent Fever.	Erysipelas.
Typhoid Fever.	Dysentery.

OCTOBER.

Furunculoid Erysipelas?	Dysentery. (Poke-juice evacuations.)
Erysipelas.	
Diarrhæa. (from hepatic congestion.)	Typhoid Fever.
Remittent Fever.	Neuralgia.
	Influenza.

NOVEMBER.

Typhoid Fever.	Diarrhoea. (from hepatic
Erysipelas.	Laryngitis.
Dysentery.	Bronchitis.

DECEMBER.

Typhoid Fever. (followed by oph- thalmia.	Pneumonia.
Erysipelas.	Neuralgia.
Diarrhoea. (from hepatic congestion.)	Dysentery. (Stools like juice of <i>Rhytolacca</i> .
Erysipelas.	(Purpura?)

On comparing the schedule of 1853 with that of the preceding year, I am myself surprised at the close analogy between them; the cholera, which did not appear here in 1853, being scarcely an exception, as a diarrhoea from hepatic congestion took its place, and proved as fatal to children as Asiatic cholera.

The remarks already made to illustrate the peculiarities of the months of one year being so applicable to those of the next that it appears to me unnecessary to repeat them, I shall therefore content myself with giving a sketch of the phases assumed by the typhoid fever, with a view to exhibit the protean form of that disease, and to establish its relation to other maladies not ordinarily supposed to belong to the same family.

Case 1st, W——d, a sailor, was sent to St. Mary's Hospital, three days after the advent of his disease. He had two chills, the reaction succeeding to which had not in either case been relieved by perspiration.

On the day of admission he had a pungently hot skin, with a crimson rash about the neck and chest; his pulse was small and frequent, without force; his tongue was covered with a dry, short, but not very brown coat; he complained of headache, pain in the limbs and back, and tenderness over the right hypochondriac space. His bowels were confined, and urine scanty.

4th day. Prescribed sulphate quinine gr. ij., hydrarg. cum. creta, gr. i. every four hours, warm drinks, hot applications to the extremities, and a blister over the region of the liver.

5th, day. Heat of the body more equal, but not appreciably diminished. The feet have become warm, and deafness has supervened. Prescription continued.

6th day. Medicine has affected the bowels, the evacuations being passed in bed. Pulse rather more full. Other symptoms much the same.—Continue prescription.

7th day. Medicine continues operating. Is conscious—will protrude the tongue, if the act is performed before him, to indicate what we wish him to do. Skin is soft, and pulse less frequent. As the stools are yet dark and not too liquid, gave him rhubarb and magnesia.

8th day. Cathartic has opened well. Patient hears and answers questions briefly. Tongue and skin moist. Rash disappearing. Urine more copious. Prescribed Mindererus' spirits.

9th day. Convalescent.

Case 2d. Cherodot, a laborer as we learned after he became conscious, was admitted on the eighth day of his illness. He did not recollect having been much unwell, before he was seized with a violent chill, which was followed by a daily exacerbation of fever, up to the time he became deaf and unconscious, three days before he came to the hospital. When I first saw him, he had epistaxis, bloody sputa, bloody stools, and occasional vomiting. His pulse was small and frequent. His head and body hot, but legs, and feet and hands, cold. He had a dry, brown tongue, and a crimson rash upon his chest. Directions for the attendant: Sponge the limbs with infusion of capsicum; make cold applications to the head, and hot ones to the feet; a large epispastic over the stomach and liver. Give gr. ij. quinine gr. j. gum camphor, and gr. j. hydrarg. cum creta, every three hours, and let him drink hot mint tea.

This plan of treatment was continued till the eleventh day of his disease, when the skin became soft, the vomiting and loss of blood from the mucous surface of the nose, lungs, and intestines had ceased, and the rash began to disappear. Under the use of Mindererus' spirits and wine whey, he convalesced rapidly, and in another ten days returned to his labor.

The following gives a view of one of the modifying circumstances in this grade of fever, if it be not, in fact, the principal cause of its adynamic character.

Case 3d. H. M. had a chill only two days before admission, at which time there was a stronger scarlet hue than usual, about the neck and chest, with intense heat of skin, dry cough, vomiting and slight diarrhoea, with scanty and high-colored urine. He had a small and frequent pulse, slight epistaxis, red, dry tongue, great tenderness over the stomach and liver, violent pain in the limbs and head, with delirium and subsultus tendinum.

Prescription: Apply an epispastic over the stomach and liver, and give him gr. iij. carbonate of ammonia, gr. j. hydrarg. cum creta, and gr. j. gum camphor, every three hours, with tepid drinks.

4th day. The vomiting is relieved, but he passed a restless night.

5th day. Evacuations having improved; delirium, succeeded by coma. Continue prescription, and apply a blister to the nape of the neck.

6th day. Symptoms every way relieved by the appearance of an erysipelatous eruption extending from the blister on the back of the neck to the one on the abdomen. From this time convalescent.

Case 4th. This case gives another of the phases of this epidemic.

Conrad Scanlon, when brought to the hospital, was livid and cold, except about the head and thorax, where the color deepened to crimson.—He had no diarrhoea, but vomited freely; had hiccough, and the kind of coma of a man heavily drunk. His pulse was scarcely to be felt at the wrist. Tongue coated, but not dry, No secretion of urine. Showed signs of pain when pressure was made over the stomach and right hypochondriac region. Measures were taken to restore warmth to the surface; but reaction was never perfectly restored. He took, until partial reaction was brought about, such remedies as hot sling, camphor, ammonia, &c. Then an epispastic was applied over the liver and stomach, which enabled him to take and retain small doses of quinine and hydrarg. cum creta, alternated with acetate of ammonia. The evacuations procured by these means were passed in bed. Under this treatment the man improved slowly for a week. The pulse became more natural as well as the temperature of the skin; but the coma never very sensibly diminished till he was aroused (not completely) by an attack of neuralgia along the left sciatic nerve, which was soon followed by erysipelas of the leg. Pupura, to a considerable extent, appeared on the right leg, and shortly before death, erysipelas was developed in the parotid glands. Before death, the tongue, teeth, and fauces had the appearance of a patient in the last stage of typhus gravior.

I will add one more case, in which there were petechiæ both on the cutaneous and intestinal surface.

Case 5th. A. B., a resident inmate of the hospital, complained of pain in the head, which was hot, whilst her hands and feet were icy cold. She was costive, and took blue pill. Her fever gradually increased, but continued to remit for the first week. In spite of treatment, the fever became more persistent; and diarrhoea and vomiting ensued; dryness of the tongue; delirium; subsultus tendinum, petechiæ, at length coma, then convulsions and death on the twenty-first day.

Autopsy. No ulceration, but an irritated condition of the duodenum and the lower portion of the ilium, with distinct points of extravasation under the mucous coat of that intestine, as well as under the cuticle.

In some of the more protracted cases, I witnessed the phenomenon called atelectasis pulmonum; which I at first mistook for hepatization of the lung, but from which recovery was slow, and ultimately appeared to be complete.

One case, which lingered from October 1853, to April 1854, furnished some interesting postmortem results. The lungs were hepatized to a con-

siderable extent, as would occur in ordinary pneumonia, if allowed to become chronic, where there was no tendency from constitutional predisposition to tubercularis. The serous tissue of the lungs and of the abdominal surface of the diaphragm, was thickly studded with deposits, in the former of the size of marrowfat peas. To the naked eye, they looked too much like caseum for tubercle. Is it probable that the grade of action common to typhus and typhoid fever will produce a morbid tissue, analogous and yet distinct from tubercle, and which, like the cells of carcinoma, may encroach on healthy structure?

Z. PITCHER.

DETROIT, April 25, 1854.

The following figures are extracted from the meteorological table of Dr. Duffield, referred to by Prof. Pitcher:

Monthly mean of temperature.				Rain.	Monthly mean of temperature.				Rain.
January,	-	17,30	-	1,879	-	24,00	-	0,877	
February,	-	24,50	-	2,527	-	30,00	-	2,394	
March,	-	36,00	-	4,545	-	42,00	-	3,181	
April,	-	45,00	-	4,831	-	58,50	-	5,984	
May,	-	66,20	-	1,197	-	69,50	-	7,977	
June,	-	72,50	-	4,866	-	81,50	-	2,567	
July,	-	74,00	-	4,832	-	76,50	-	2,233	
August,	-	74,00	-	2,409	-	78,50	-	3,597	
September,	-	66,00	-	6,034	-	69,50	-	2,557	
October,	-	60,00	-	3,935	-	51,47	-	2,571	
November,	-	42,00	-	2,649	-	43,50	-	4,393	
December,	-	38,50	-	6,826	-	30,00	-	1,461	

By comparing these tables, the reader will observe that there is in them a confirmation of the idea that epidemics are more influenced by moisture than by temperature. Thus the rain in the summer of the year 1853 was only about half that of 1852 at the corresponding months, and the cholera did not show itself, although the temperature was several degrees higher. We are not prepared to say how much truth there is in the idea, but it is well to note this one fact and lay it up for future comparison.—Another thing suggestive of much thought, is the constant association together of dysentery, erysipelas, and typhoid fever and cholera. The opinion expressed by Prof. Pitcher that there is a common basis and nature to the epidemic variety of these complaints, or rather a common pathological element which lends them all its malignancy, is illustrated in a marked manner, and impresses itself deeply upon the philosophic mind.

The upper peninsula is not mentioned. It lies between lakes Michigan and Superior. Geologically, it consists of the lowest stratified rocks, through which, in numerous places, the igneous rocks have burst their way upward, forming mountain chains. The water is soft and pure; the climate cold in the winter, and subject to extremes of heat in the summer. Cholera has prevailed at Sault Ste Marie, but what diseases, if any, are peculiar to the mining districts, we are not informed.

On the whole, this report contains much valuable information, but it is to be regretted that their calls upon the profession for information, were not responded to sufficiently to enable them to give a complete view of the epidemics in their district.

ART. V.—*Abstract of Meteorological Observations made at the University of Michigan during the month of January, 1855. By A. Winchell, A.M., Professor of Physics and Civil Engineering.*

(For standing Explanatory Notes, see last No. of this Journal.)

TABLE I. CLOUDS AND WINDS.

CLOUDS.						WINDS.										
Direction.	7 A. M.		2 P. M.		9 P. M.		Resultant		7 A. M.		2 P. M.		9 P. M.		Resultant	
	No. obs.	Mean Veloc.	No. obs.	Mean Veloc.	No. obs.	Mean Veloc.	Total	No. obs.	Mean Force.	No. obs.	Mean Force.	No. obs.	Mean Force.	Total	No. obs.	Mean Force.
N.	0		1	4.00	2	1.50	3	2.33	1	1.00	0		1	2.00	2	1.50
N E.	2	3.00	1	2.00	2	3.00	5	2.80	2	3.00	1	3.00	3	1.67	6	2.33
E.	2	2.50	1	4.00	2	3.00	5	3.00	3	2.00	1	4.00	3	2.33	7	2.43
S E.	1	2.00	4	2.25	2	2.00	7	2.14	5	2.00	3	2.50	4	1.75	17	2.18
S.	4	1.50	2	3.50	4	3.50	10	2.70	3	3.00	3	2.67	6	3.33	12	3.08
S W.	8	1.50	8	1.87	10	2.80	26	1.88	10	2.50	9	2.67	7	2.71	26	2.61
W.	9	2.78	9	2.67	3	3.00	21	2.76	4	3.75	6	3.67	4	3.00	14	3.50
N W.	3	1.67	2	4.00	0		5	2.60	3	2.00	3	3.67	1	1.00	7	2.57
0	2		3		6		11		0		0		2	0.00	2	0.00
Month. Mean	31	2.10	31	2.61	31	2.56	93	2.41	31	2.51	31	2.97	31	2.52	93	2.61

TABLE II. STORMS.

Cyclone.						Precipitation.		
No.	Com- mence- ment.	Dura- tion.	Fall of Barom- eter	Fall below Mean	Minim attain- ed	Date of Mini- mum.	Dura- tion.	Character.
		hrs.	in.	in.	in.		hrs.	in.
1	Dec. 29.	144	.317	.057	28.971	Dec. 30, 9 p.m.	3	.126 Rain.
2	Jan.	55	.685	.089	28.939	Jan. 6, 9 p.m.	30	.534 Freezing Rain, Snow,
3	8	72	1.304	.524	28.504	12, 9 p.m.	6	.258 Snow
4	14	79	.586	.320	28.708	17, 9 p.m.	2	.187 Snow
5	18	82	.933	.933	28.095	21, 9 p.m.	20	.570 Snow
6	25	24	.556	.484	28.544	25, 9 p.m.	28	.372 Snow
7	27	48	.390	.659	28.369	29, 7 p.m.	63	.404 Snow
1504—58 hours in Dec.=446 hours in Jan.						122 2.450		

TABLE III.

Hour.	Barometer		Thermometer.	Mean Cloudiness.	Mean Humidity.
	At 32 °	At sea lev.			
7 A. M.	29.028	30.029	22.2	8.26	89.9
2 P. M.	28.997	29.998	28.0	6.97	79.4
9 P. M.	29.000	30.001	24.3	7.39	86.7
Month	29.008	30.009	24.8	7.54	85.3

TABLE IV.—EXTREMES.

		SINGLE OBSERVATIONS.								Mean of entire day	
		7 a.m.		2 p.m.		9 p.m.		Month.		Day of M	Daily Mean.
		Day.	Obs.	Day.	Obs.	Day.	Obs.	Day.	Obs.		
Maxima.	Barom.	8	29.808	8	29.704	7	29.758	8	29.808	8	29.680
	Therm.	6	51.0	6	58.0	6	59.0	6	59.0	6	56.0
	Humid.		100*		100†		100‡		100.	25	100.0
Minima.	Barom.	29	28.369	21	28.286	21	28.095	21	28.095	21	28.366
	Therm.	23	-1.2	22	8.5	22	-1.7	22	-1.7	23	5.3
	Humid.	15	69.	3	52.	6	60.	3	52	3	66.0

Remarks—After the 17th the thermometer was not above 32 deg. Of 93 observations made on the clouds during the month, at 56 the sky was completely overcast, at 71, half obscured or more, and at 11, no clouds were visible, 6 of which latter observations were made at 9 P.M., and only 2 occurred after the 17th. Most of the observations on partial cloudiness were also made before the 17th. There was an unusual amount of wind from quarters east of the meridian. Snow fell on 16 days, 9 of which were after the 17th. The 2nd, 3rd, and 12th, were the only pleasant days of the month. The snow which fell on the 21st, and subsequently, made excellent sleighing. The mean temperature of the first 6 days was 39.22 deg., which had the effect of raising the mean of the month 0.4 deg. above that of December.

* On the 1st, 2nd, 11th, 16th, 21st, 23rd, 25th, 28th, and 31st.

† On the 16th, 25th, and 27th.

‡ On the 15th, 25th, and 28th.

ART. VI.—*To the Editors of the Peninsular Journal of Medicine.*

JACKSON, FEBRUARY 7TH, 1855.

GENTLEMEN:—

On the 3rd of last December, at 10 o'clock, P.M., I was called, in consultation with Dr. T., to visit a woman in labor.

I repaired to the place immediately, and found the Dr. there, who related to me the particulars of the case, as follows: He was called on the evening previous to attend the woman, (Mrs. —). She was over 40 years old. Labor had commenced some two hours before he arrived. He made an examination, and found a sac of water occupying the pelvic cavity. He did not interfere with the sac, which soon ruptured sponta-

neously, followed by an abundant discharge of water. He again made an examination and discovered that an ear presented. Having waited the result of a few pains, hoping the position might be altered without his assistance, and finding them ineffectual, he at length introduced his *hand* and corrected the position *without difficulty*. The head seemed large and firm, and he thought the fontanells were almost obliterated. The labor now went on; the pains vigorous, but the progress very slow. He remained a close attendant through the night, but so tedious was the progress that he thought it advisable to send for instruments and an assistant. When the consulting physician arrived with the instruments they deemed it advisable to administer a dose of morphine, to allay some gastric pain and irritability. In a short time the gastric pain increased, when another dose of morphine was given. She now used some exclamation, such as "It is coming!" which alarmed him (Dr. T.). From this time uterine action declined and finally ceased. Brandy was administered, but it was of no avail. Vomiting now commenced; the pulse failed; the skin covered with a clammy sweat; her countenance was blanched, and her extremities deathly cold. She asked to be raised in the bed, and complained of a peculiar burning irritation in the region of the stomach. The Drs. feared there was laceration of the uterus. They accordingly urged immediate instrumental delivery; but the friends would not consent, and continued obstinately to oppose it.

The consulting physician, soon after left the house to attend to his other professional duties.

She grew more and more exhausted, without any other particular change worth noting. It was then *eight hours* since uterine pains had ceased. After the Dr. concluded his statement he requested me to examine the patient. On approaching, I saw that her countenance betokened much prostration, but was calm, except when the *burning* pain in the stomach was more than usually severe. There was no peculiar *anxious expression* there, as may be expected if such a formidable accident as rupture of the *womb* had been the cause of the present prostrate condition of the patient. There was no pulse perceptible at the wrist. The upper and lower extremities were deathly cold and bedewed with a clammy sweat. The abdomen was *more than usually full*. I made pressure over the entire abdominal surface, but could not, by doing so, elicit any peculiar expression of suffering—not even as much pain as is felt in an ordinary case of labor. She vomited frequently, but the fluid ejected was simply

that which was previously drank, mixed with the *light colored* excretions of the stomach, and occasionally some healthy colored bile. I made a digital examination *per vaginam*. The child's head was easily reached, it having entered the inferior strait. The head seemed *movable*,—this was also the opinion of Dr. T. I stated to the doctor my doubts of there being laceration, on the ground that there was no *anxiety of countenance*, no *dark colored* vomiting, and not even the ordinary amount of *pain*, when pressure was used, over any portion of the abdomen.

I asked the Dr. what he had done since uterine action ceased. He said, "I have given her brandy and warm drinks, but she will not retain either." I said "Have you any doubt in your mind of *rupture*?" He said, "I have some doubts, but what can I do?" I said, "If you have any doubt that there is laceration, your patient should have the benefit of that doubt. Had you not better try ergot by enema, as it will not be borne on the stomach?" I stated to the Dr., at the same time, that I doubted very much if any means he could now bring to bear would be of benefit. The Dr. adopted my suggestion, and requested me to send for the drug. With his consent, I wrote for *tinct. ergot* $\frac{z}{iv}$, or $\frac{z}{v}$, I do not now remember which. The druggist mistaking the particular form in which I required the drug sent me a quantity of powdered ergot. When I had written the prescription the Dr. said to me, "Will you remain while I visit my other patients, whom I have not seen to-day?" I said, "I am afraid I cannot, as, you are aware, I have charge of a very sick boy near your house, who requires almost my whole attention. As, however, you have not seen your patients to-day, I will consent to stay for *one hour*. In the meantime, if you desire it, I will attend to the use of the ergot." The Dr. left the house, and when the ergot arrived it was prepared, and used at intervals of *thirty minutes*. It produced no more effect than to excite a slight uterine pain. The pulse as imperceptible as before. The extremities were warmed by friction and warm applications. I had been some time anxiously waiting the Dr.'s arrival, as his *hour* had nearly lengthened into *two*. I was about leaving the house when he arrived. I stated what I had done, and with what effect. He said, "Dr., I am almost inclined to fall in with your opinion that there is no rupture." He said he would continue the ergot. I departed, with a request from the Dr. that I would again call in the evening.

About 6 o'clock, P.M., I was again sent for. On arriving at the house, Dr. T. informed me that he had used the ergot, but with no better effect than before.

We now told the friends she was too far gone for any hope of restoring uterine action; and that the only means of delivery was by instrumental aid,—at the same time stating our conviction that she would die in the operation. But the friends would not consent. Deeming that my presence could be of no farther benefit there, I prepared to take my leave. On leaving the room I saw Dr. T. also making ready to accompany me. I said, “Dr., will not the friends feel neglected if you leave them at this time? They will certainly expect you to remain.” He replied that he could do no good, and it was, therefore, useless to stay. We left the house together; walked up town, and parted near the Dr.’s house, whence I repaired to visit my patient, with whom I spent the remainder of the night.

Toward morning a messenger called to request I would repair to Mrs. ——’s house, for the purpose of delivering her!—stating that she had died a short time before. I asked why they did not call Dr. T. He said he had, but the Dr. refused to go. I requested they would get some one else, as I could not possibly leave my little patient that night. I was again sent for next morning. I went there with a view of inducing them to dispense with the operation of delivering, as they expected me to perform it *per vias naturales*. On arriving at the house, I stated to the friends the difficulty that would attend delivery in the way they suggested, and endeavored to show them how unnecessary it was to deliver at all, but was not successful. Not expecting they would permit me to use a knife, and deliver through the abdominal walls, I simply made the suggestion, hoping their refusal would give me a plea to give up the case. But, contrary to my expectations, they consented. I stated that it was necessary to have Dr. T. present. They would not permit it—stating that he had left them in their greatest affliction, and would not come when sent for.

I told them the Dr. could do no good by remaining. Failing to obtain their consent to call any other physician, on the ground that they did not wish to have anything more done than merely take away the child. I proceeded by making an incision along the *linea alba*, from the *umbilicus* to within two inches of the *pubis*. Feeling anxious to ascertain if there was rupture, I very carefully dissected down to the *uterine tumor*, and then, with the aid of a *director*, laid open the abdominal walls, and exposed to view the anterior surface of the distended uterus. I then introduced my hand into the abdominal cavity—passed it round the womb

as far as possible. So far I could detect no rupture; the uterus seeming like a *sac distended to its utmost*. I made an incision through the walls of the uterus, and exposed the child in a perfectly natural position. After removing the child, which I effected with a great deal of difficulty, from the fact that the child's neck was firmly grasped by the neck of the womb, I examined the uterus on its external surface down to the neck, but could not find any laceration. Desirous of being perfectly satisfied, and thinking that the laceration may be external, leaving the internal serous structure uninjured, I made an internal examination with the same results as before. The uterus contained a large quantity of blood, part coagulated and part fluid. On passing my hand along the *cord* I found the *placenta detached, by two-thirds of its surface, from the side of the womb*. I did not examine the *neck* very thoroughly, because the friends were anxious to have it concluded; and it would require more time than I was confident they would allow, from the anxiety they manifested to have me conclude the operation. I closed the examination, satisfied that *internal hemorrhage*, from separation of the *placenta*, coupled with a powerful and long continued uterine action in a woman of her age and temperament (age over 40; nervous temperament predominating) were the cause of the *utler prostration* and *ultimate death* of the patient. On the first favorable opportunity I related the result of the examination to Dr. T. He seemed dissatisfied, and would not hear a full explanation.

The details of the above case are necessarily drawn out to tedious length. The reasons for trespassing so largely on your time and the patience of your readers, will be seen from the following circumstances:

In the last number of your "Journal" I notice a case, reported over the signature "Tunncliff," and dated Jackson, December 18th, 1854, the leading features of which, are, unmistakably, intended to represent the case I have just described. But the details are so much at variance with my understanding of them, that if the case were stripped of a few of its leading facts, I should fail to recognise it as having any relation to the one in question.

Under the fictitious appellation of "Dr. D." I perceive an allusion to myself. To place the case in a truthful light before the medical public, and to shield my reputation from injury, is the sole object of this communication.

I am opposed to all controversy among physicians, other than that which pertains to the discussion of scientific principles, and I regret that

your contributor should have so misunderstood the facts of the case as to render this communication necessary.

Very respectfully yours,

JOHN O'BRIEN.

We have now given both parties of this case an opportunity to be heard, and we presume that the facts, so far as they have any scientific bearing, are fully stated, and further debate, therefore, would savor more of personal controversy than of Medical information, and we hope that the matter be amicably dropped here.—Eds.

SELECTIONS.

The Ice Beds of the Sweetwater.

[The *Saturday Evening Post* contains an interesting account of some remarkable saline deposit on the route to California, which has been always reported by travelers as a bed of ice, but which the writer, a physician of this State, discovered to be a salt of potassium. We take some extracts from the article:—Eds.]

DEAR POST:—I notice in your paper of the 2nd inst., you copy an article from the *San Francisco Chronicle*, signed a “*A Forty-Nine Emigrant*,” who vouches for the existence of a subterranean body of ice on the Sweetwater River, with remarks by the editor, who undertakes to account for its existence there.

* * * * *

In 1852, I travelled up the Valley of the Sweetwater, and had the felicity of examining this body of ice, and I now propose to give you the result of such examination; and though I may not be able to “account for its existence,” yet, when I have done, I am satisfied that you will be convinced that it is not so strange, after all, that such a deposit should exist in the Valley of the Sweetwater; at least no more so than the acknowledged fact of the existence of Carbonate of Potassium (saleratus) found there in so large quantities, and in so pure a state, covering valley

and plain, and even floating on the surface of inland lakes, which have no visible inlet or outlet, and, of course, no current; lying upon its placid surface in layers frequently six inches in depth.

* * * * *

We camped on "*the ground*," and having made our arrangements for the night, we took the earliest opportunity to explore the *Ice Beds*.

The soil is essentially and entirely a rich alluvium, more or less saturated with water, according to the distance from the surface. We found, at about three feet depth, the shovel fell with a ringing sound, upon a solid body, of the depth of which I could form no judgment, for it was exceedingly hard and difficult to penetrate; and shovels at that depth, with a small opening at the surface, are not the most effective instruments in the world to secure the object. By dint of hard labor, however, we finally succeeded in breaking it up to some extent, and behold! the glorious ice was in our hands. "It looked like ice;" "it felt like ice;" "it smelt like ice;" and it tasted like — hold! almost anything else "*under the sun*."

"*Forty-Nine*" may well say it had a brackish taste, for most assuredly he is correct. It tasted of the soil saturated with alkaline water — which was unpleasant enough, probably, to satisfy him without further test; and he, as all others had before him, (and nearly all after him) dropped it into its "*mother earth*," leaped into the saddle, plunged his large Missouri spurs into the luckless sides of his astonished mule, and for a time with energy pursued his toilsome journey to the "*Eldorado of the West*," mentally occupied with the astounding developments thus presented to his mind, so conclusive to his judgment. And after he arrives in California, ask him if he saw the *Ice Beds*, and he will answer you most emphatically that he did; "he dug it; he handled it; and tasted it; and it was ice;" and he is ready to sustain his assertion with one of Colt's repeaters, if necessary; and he will tell you, and truly, too, that there are "thousands now in California who will testify likewise."

But, sir, what is the truth? Is it ice? I regret being the instrument for overturning so beautiful an *idea*, that *Providence* had so wisely and mercifully prepared and filled an immense ice-house in the path of the wearied and thirsty traveller; but truth compels me to say it is *not* ice. It is an immense subterranean deposit of crystalized Salt of Potassium — either the Carbonate, Nitrate, or Sulphate of Potassium — probably the first. I had with me no means of analysis, and no time to spare for a lengthened examination; I, however, took two pieces along with me — one I presented to Secretary Babbitt of Utah Territory, at Salt Lake City; the other I took with me to Sacramento City, and some one who borrowed it forgot to return it; and though I have unfortunately retained no specimen, yet being convinced beyond a doubt myself, I venture to give you, and if you wish, the readers of the *Post*, the reasons as above which have influenced my judgment. Why this immense deposit of Potassium exists there, and is not leached off or carried away by the annual floods, I am unable to answer; yet there it is; there is prepared or retained

all, or nearly all of the Potassium and other alkaline elements of the vegetable productions of an immense region of country. For some reason it does not permeate the soil, and for some other reason, probably depending on the peculiar topography of the country, it fails to find its way to the Gulf of Mexico.

Respectfully yours,

TUNNICLIFF.

JACKSON, MICH., DEC. 12, 1854.

Correspondence of the Illustrated London News.

Anæsthesia by Cold in Surgical Operations.

SIR,—The experience of the last few weeks has proved to my complete conviction that local anæsthesia can be obtained by the benumbing influence of ice, without resorting to the administration of chloroform, which, by its subtile power renders insensible the system generally, and occasionally produces those fatal effects to which almost every surgeon can bear testimony. I have tried the ice in several cases, in both hospital and private practice, and in almost every instance the success was evident, the patient, when blindfolded, being ignorant of the use of the knife. It affords me great pleasure to confirm the evidence of Dr. Arnott upon this interesting subject, and to draw the serious attention of surgeons, both at home and abroad, to this agent, whereby patients can be freed from the pain which attends many every-day operations we are called upon to treat with the knife, and reserve chloroform for those very severe cases where either the duration of the operation or the depth of structure requires the employment of that potent agency.

I am, sir, your obedient serv't.

THOMAS WAKLEY, F.R.C.S.

Arlington street, Feb., 1855.

EDITORIAL.

Legislative Action respecting the Medical Department of the University of Michigan.

It is probably known to most of our readers, that the Legislature of the State of Michigan at the close of its recent session, passed an act commendatory of the establishment of a "chair of Homœopathy in the Medical Department of the University."

We say *commendatory*, as it certainly can be nothing more. The

Board of Regents, an independent body of men, elected by the people, being endowed by the constitution of the State with the exclusive power of managing all the affairs of the University—of establishing chairs, appointing professors, and expending funds.

The constitution says, Article XIII., Sec. 6th, "There shall be elected in each judicial circuit, a regent of the University. The regents thus elected shall constitute the Board of Regents of the University of Michigan."

Sec. 7. Provides for these regents, and their successors being constituted, and known as a body corporate.

Sec. 8. Provides for the election of a President of the University, to be, ex-officio, a member of the board, and says: "The Board of Regents shall have the general supervision of the University, and the direction and control of all expenditures from the University interest fund."

No one, we presume, will deny that the constitution places the management of the University entirely within the hands of the regents, and beyond Legislative interference, making the regents alone responsible for the same.

If the Legislature seriously took the subject into consideration, as we hardly suppose they did, (the question not having been at all debated in the house, and the action occurring at a period when all was hurry and confusion,) they must have looked upon it merely in the light of a suggestion, knowing the regents had the power, and must take the responsibility to decide respecting it themselves; and indeed we have reason to believe that the few Homœopaths who urged it so strenuously, expected or hoped to do nothing more than to bring their system and themselves into notice, having by all their former efforts failed to do so, except in comparatively few localities in the State.

Petitions have been presented to former Legislatures, for the establishment of chairs in the University, not only of Homœopathy, but also of Hydropathy, Thomsonianism, and Uroscopia, and hitherto all these have been classed together and alike disregarded. This season the whole strength has been centred upon Homœopathy, and we suppose that body, with the effect if not the design of avoiding future importunities, have passed this act; and if it be treated by the Regents, as everybody seems to believe it will, the Homœopaths, the Hydropaths, the Eclectics, and all the rest, will have to resort to some other measures for advertising their respective systems.

As already stated, the Board of Regents are an independent body of men, elected by the whole people, and directed by the constitution to govern the affairs of the University; and the Legislature have no more right to interfere with that government, than they have with the special duties of the judiciary, or than the Regents have with the special affairs of the Legislature. Their authority is derived from the same sources, and each is responsible not to the other, but to the people for the exercise of their powers.

The Board of Regents, men of independent responsibility, of sense and experience, and who have studied carefully the subject of their charge, and have a deep regard for its honor and interests, are fully aware of the utter impossibility of mingling a Professor of Homœopathy, of Hydropathy or any other exclusive system, on any terms with the *present* faculty.

They further know the inherent incompatibility of Regular Scientific Medicine and any of these systems. That they cannot possibly be taught in the same school. That if even men of the Regular Profession could be found, as of course they cannot—who would submit to the Professional degradation of trying the experiment of having men sent among them with equal authority to teach that their doctrines were dangerous follies, nothing but scenes of confusion could result, if indeed students could be found willing to enter such a babel of various tongues, and from which it would be impossible to carry away a certificate of competency to practice the healing art from all their instructors, worthless even as such a mongrel certificate, if it could be obtained, would be regarded.

The Regents, like all men of sense, well know that those who would go forth to prescribe exclusively upon the principle of “like cures like,” who pretend that all diseases should be treated according to their symptoms, and not according to their nature and cause—that no attention in treatment should be paid to the essential pathological condition—that the symptoms or feelings so variable and irregular are alone to be regarded; and who are to use as medicinal agents many substances the most inert, and all in quantities inconceivably minute—of the most mythical attenuations—they well know that such men could not receive the honest recommendations of those of their teachers who reject such puerilities, and who believe those led by them useless in community and negatively dangerous. And on the other hand the Regents know, that those students who believe in what we regard as rational medicine, and would go forth to practice on principles declared by the homœopaths to be false and injurious,

could not receive the endorsement as proper practitioners, of one professing opposite views, and who paid the least regard to consistency; even if a single regular student could be found who would accept of a parchment with such a name upon it.

The same remarks will apply to all the other systems which, if this should be admitted, would with equal propriety demand a representation in the University; so that if the field were completely abandoned by the Regular Profession, the other discordant sects would prey upon each other, until, as in the case of the famous Kilkenny cats, only the smallest fragment of the caudal extremity of the most vigorous would be left to mark the scene of encounter.

We do not feel this deep repugnance to the mingling of these various systems in the medical department of the University because we fear to meet them in controversy. On the other hand we would be glad of an opportunity of showing what their claims and pretensions are, before any competent body sufficiently interested to listen to a discussion. We would debate homœopathy or any other of the systems before the Board of Regents or any other proper tribunal, to their heart's content. But we must meet them as opponents and not as co-laborers. We must meet them, to use an illustration not intended to cast the slightest slur upon any party religious or medical, as a Presbyterian would a Universalist, a Catholic a Protestant, or a Christian a Mahommedan, not by a forced mingling in the bosom of the same church or the same ecclesiastical council, but in the open field of honorable controversy. Our regard for the Profession of which we are members; our sense of propriety and honor; our professional relations and standing, as well as our desire to preserve the integrity of the Institution with which we are connected, all forbid such unnatural union.

So far as we have been able to learn the views of the Regents, they clearly see, as every man who understands the subject must, the utter absurdity and total impossibility of any such amalgamation—and knowing their duty (and responsibility, and feeling a deep regard for the Medical Department, and the whole University, which has risen to so high a position under their fostering care, they have not the slightest notion of throwing a fire brand into its midst, which would not only explode one department, but would cause the whole fabric to tremble to its centre.

There is now peace and harmony within its borders, the most cordial

unity, and the highest satisfaction between teachers and pupils, on every hand exists, and the whole faculty, from the President through all the departments, would regard any other course on the part of the Regents than that we so confidently expect as among the greatest calamities the University could suffer.

We would say to the friends of the University and the Profession everywhere, that we have reason to announce that the Regents too well understand their duty to allow of unwarrantable interference with their affairs from any source; and too deeply regard the interest of the institution to pursue a course so entirely unprecedented as the action in question, and yet so certain to result in evil and ruin. The prospects of the Medical Department were never brighter than now. Its course of instruction has been largely extended, and its means of illustration proportionably increased. And untarnished as its honor is, and as we confidently predict will be, and with the continued support of the Profession at large, it will out-ride every storm concocted by its enemies, will go steadily on to its high destiny of enlarged usefulness, and as we hope of honor and renown.

Meeting of the State Medical Society.

[Circular.]

Notice is hereby given that the third annual meeting of the Michigan State Medical Society will be held at Ann Arbor in the Medical College of the University at 12 o'clock M., on Thursday the 29th day of March. A general attendance of the physicians of the State is requested.

HENRY TAYLOR, M.D., *President.*

E. ANDREWS, M.D., *Secretary.*

We hope that every physician in Michigan will endeavour to be present at this meeting.

It is desirable that all County and other local societies should send two delegates each, and all regular physicians may and ought to become permanent members.

It is hoped that as many as possible will bring papers to read before the body, in order that its proceedings may be as full and interesting as possible. To organize our forces is the great work which the profession of this region have now to accomplish, and this society now about to convene for the third time, is the nucleus around which we are to accumulate our power and centralize our influence. By this annual gathering we shall exchange valuable thoughts on science and cherish still more

valuable sentiments of unity and brotherhood and be able to concert plans for the increase of knowledge and up-building of our professional honor.

Furthermore, there is on the records of the National Medical Association an invitation to meet at an early day in Detroit.

If this invitation is accepted, it is important to our reputation that we be prepared to show them here a profession well organized and powerful, and maintaining in vigorous life its state and local societies.

At the coming meeting, among other business, delegates are to be chosen to the next meeting of the National Medical Association.

It may be of interest also to many to know that on the forenoon of the 29th the commencement exercises of the Medical College will be held; and on several other accounts it will be an occasion of the utmost interest and importance to the society and to the profession; let there be a general gathering from every quarter of the State.

Museum of the Medical College of the University of Michigan.

The interest felt in the College by the Medical Profession has been evinced by valuable donations for the Museum of the Medical Department of the University. It will be seen that the Physicians of our own State are not alone in their desire to aid the cause of science.

The following action of the Faculty needs no explanation:

Whereas, Edson Carr, M. D. of Canandaigua, New York, through Prof. C. L. Ford, has deposited in the Museum of the Medical Department of the University of Michigan 75 choice specimens of Physiological and Pathological Anatomy for the benefit of the Institution, therefore,

Resolved, That the thanks of the Medical Faculty be and are hereby tendered to Dr. Carr for his very generous contribution to the cause of Medical Education, and that the specimens shall receive every care necessary for their proper preservation.

C. L. FORD, Sec. Fac.

ANN ARBOR, Feb. 22, 1855.

Autobiography of Charles Caldwell, M. D., with Preface, Notes and Appendix. By HARRIET W. WARNER, Philadelphia. Lippincott, Grambo & Co. 1855.

We have had time only to glance over this handsome volume of 454 pages, selecting here and there a few pages for perusal, but have seen enough to be convinced that the book is a very readable one. Much of it is occupied with descriptions of personal interviews, and professional intercourse, both

as student and fellow practitioner, with such men as Rush, Wistar, Barton, Physic, &c., of the older times of medical science in Philadelphia.

Dr. Caldwell was a remarkable man—remarkable for originality and independence of thought, and the “*myself*” stands out very prominent on every page, and in almost every paragraph of the book, but the reader feels that this individual entity is one worthy of consideration. The author seems to have good reasons for thinking well of himself, and one almost admires him for his frankness in expressing his earnest feelings on the subject. Not only was his earlier life in Philadelphia rich in incidents, but his connexion with professional development in the west, has been extensive and of the deepest interest. The style of the book is remarkably clear and vigorous, and we predict for it an extensive sale. It is embellished with a fine engraving of the author, who was physically, as well as mentally, a man of decided mark.

Positive Medical Agents.—Being a treatise on the New Alkaloid, Resinoid and concentrated preparations of indigenous and foreign medical plants. By authority of the American Chemical Institute. B. Keith & Co., New York.

The above is the title of a book of over 300 pages, which we have received from the proprietors of this medical establishment, the “American Chemical Institute.” The work consists of three parts, viz: General Considerations, Concentrated Preparations, and Clinical Reports.

The author professes to be a regular practitioner, but to be engaged in obtaining results by the exclusive use of these “positive principles” of plants, mostly indigenous, many of which have not an established reputation in the profession. Such articles as Podophyllin the active principle of Podophyllum Peltatum or Mandrake root—and Leptandrin, which is obtained from the root of the Leptandra Verginica or Culver’s Physic—and the principles from the Wahoo, Golden Seal, Skull Cap, Bloodroot, Bayberry, &c., &c., are dwelt upon and their virtues enumerated.

How far the statements made are based upon sound therapeutical principles and enlightened experience we are not able to say, but we shall by no means object to the multiplication of the instruments with which we work, provided the utility of each is well established.

That all these articles capable of impressing strongly the system may have their uses there can be little doubt, and the operations of our older mendicinal agents are not always so satisfactory as to furnish us no inducement for seeking further. We are quite willing therefore to give these

preparations, many of which are from plants of established reputation, a fair hearing, and at least an occasional trial. We very thankfully receive the specimens which are offered for the cabinet of Mat. Med. in the University.

A. B. P.

Report of the Select Committee of the Senate of United States on the Sickness and Mortality on Board Emigrant Ships, Aug. 2, 1854.

We are indebted to Hon. Hamilton Fish, Senator from N. Y. and Chairman of the committee making the above report, for the document, consisting of a volume substantially bound of 147 pages.

This volume comprising the report proper of the Committee with various accompanying papers from Medical men and others on the subject of the sickness and Mortality on board Emigrant Ships, discusses the whole subject of diseases on board those vessels, and their causes—the extent of their prevalence and the deaths produced, and the means of prevention.

We have the old story over again, by far too familiar to us both from reading and observation—of confinement of large numbers in limited apartments—of the retention in these apartments of secretions from their bodies, of too great exclusion of pure air, of the consequent generation of Typhus Poison, of the prevalence of Cholera, &c. &c. After going into various statistical statements the Report says:—"It appears, that the ships on board of which Cholera broke out were those which were most crowded with passengers, and that the vessels on board of which most deaths from other diseases occurred were the next most crowded, whilst the residue which were healthy, had the lowest average of passengers."

It seems in addition to all this sickness and mortality, that beastly licentiousness is also prevalent from the mingling of the sexes in the same apartments both by day and night, and thus the emigrant ships become sinks of moral as well as physical impurity, contagion and death.

This is indeed a sad picture, a terrible fact, that these down trodden children of poverty and oppression, in seeking a new home, wherein to better their condition, must pass through this flood of death, physical and moral, before reaching the land of promise and hope.

And even after landing upon our shore, they have not passed this flood. Hurried from ship board with all their filth upon them, they are crowded into emigrant cars, constructed with strict reference to unwholesomeness and discomfort, and are sent through the country scattering disease and death in their train.

We turn from this picture to enquire, what is to be done to remove the evil. Shall these things continue in the nineteenth century, in the view of all men, and after such a report as the one before us has been presented to the Congress of the United States—a body of certain jurisdictions over the subject?

When shall we have a sufficient and satisfactory answer? A. B. P.

What to Observe in Medical Cases.

This is the title of a little work published by Blanchard & Lee, of Philadelphia. It is the second American from the second and enlarged London edition. The new edition contains, in addition to what was in the old, a section on treatment. The necessity of such a work is this: Many an intelligent practitioner, who understands perfectly the significance of every symptom which he may happen to notice, yet makes an unsatisfactory examination and defective diagnosis of his cases, simply because he has no system about it. Going about it in a helter-skelter kind of a way, he perhaps examines, at random, some of the prominent traits of the disease, and *perhaps* makes a good diagnosis, but from the want of order and system in his thoughts, he is likely to forget or neglect important particulars, and consequently runs the risk of committing serious errors in treatment. This book is designed to correct this irregular mode of thinking and examining. It is arranged in sections with the section titles in the margin, in the manner of a law book, and the whole one of the finest aids to a young practitioner which we have ever seen.

Tieman & Co.'s Surgical and Obstetrical Instruments.

There is now to be seen, in the University Museum, a beautiful series of obstetrical instruments, presented to the medical department by Tieman & Co., manufacturers, New York city. The series embraces various kinds of forceps, blunt hooks, crochets, porte-caustiques, actual cautery irons, scarifiers, several most beautiful specula of various forms, pessaries, etc., etc. Tieman & Co. are manufacturers of the very best reputation, and those who have used their instruments, whether obstetrical or surgical, can testify to their excellence. For further information we call attention to the advertisement on our cover, and to the instruments to be seen in the museum of the medical college. Surgeons should be aware that their reputation is very much in the hands of the instrument maker. If an instrument breaks, or fails at some critical and unfortunate moment, the operator is disgraced and injured without his fault. Therefore, when we have manufacturers like Tieman & Co., whose work is all done upon honor, it is our duty to appreciate and patronize them.

The "Dublin Dissector." S. S. & W. Wood, No. 261, Pearl St., New York, Publishers.

The appearance of a new Edition of the "Dublin Dissector" speaks well for American Medical Students who have exhausted the former issues. A work of such sterling merit may well be the companion of every student in the dissecting room, and if he follow the instructions therein contained, he will lay a sure foundation for future security in the practice of his profession.

The fame of this work was long since established, and it needs no endorsement from us.

We wish Dr. Watt's duties had allowed the preparation of a full alphabetical index, a duty easily accomplished by the aid of Harrison's Anatomy, which is but an enlargement of this work. We hope the publishers will look to this before another edition shall be called for, assured that it will enhance the value of the work and promote their interest.

Since the above was written, "Harrison's Anatomy" "a text book of practical anatomy by Robert Harrison, M. D., &c., with additions by an American Physician, and numerous illustrations," by the publishers of the above work, has reached our table.

It is from the same practical hand as the Dublin Dissector, and furnishes evidence of the same care and accuracy of description. It is of course more minute, embracing many matters properly omitted in a work designed especially for the dissecting room. It is a good system of anatomy and we are glad to find it accessible to the profession and students who have so justly prized the "dissector." C.

We find upon our table "Goddard on the Teeth," "with 30 plates," a quarto volume from the press of S. S. and W. Wood, No. 261, Pearl Street, New York.

It might at first strike the reader that a work on the teeth would most appropriately emanate from a practical dentist, instead of the "demonstrator of anatomy in the University of Pennsylvania:" which position, by the way, he long ceased to hold, although at the appearance of the first edition of the work, some ten years since, he was the honored occupant of that responsible post of duty.

He finds an "apology for presenting the work to the profession in the want of some practical treatise on the teeth, and particularly on the manufacture of porcelain," which about that time assumed an importance

and perfection little anticipated a few years previous; but which since the first appearance of the work has far surpassed any thing produced at that time. The formulæ and directions for the manufacture of teeth we apprehend will be of little value to dentists generally owing to the modifications resulting from investigation and experience since these were first published to the world, and besides we apprehend dentists generally, do not now undertake the manufacture of teeth, finding in market, the productions of the best skill and science, at a cost far below that of their own individual enterprise.

From the preface we learn that the work is intended rather for beginners than experienced dentists, and it appears to contain valuable instruction and judicious advice adapted to the wants of those about to enter this useful and honorable profession.

The first few pages contain some very curious things concerning the early knowledge and opinions of these very important organs—the teeth. Our illustrious ancestor, Hippocrates, is quoted as saying, “there is a glutinous excrement from the bones of the head and jaws, of which the fatty part is dried by heat and burnt up and the teeth are made harder than the other bones, because there is nothing cold in them.” Ambrose Paré states that their adhesion to the jaw is caused by a ligament which goes from the root of the tooth to the jaw. If we remember correctly, a few years since, some little noise was made in the world—the dental world—by a person claiming to extract teeth with almost luxury to the patient, by first dividing the ligament. But those operators who remove teeth for us, had not the knowledge or knack to make luxury of the job.

Correct knowledge of the teeth is of very recent acquisition, for which we are indebted to such men as Purkinje, Retzius, Nasmyth, and Owen, who by the aid of the Microscope have revealed their true structure; while Arnold, Goodsir, and others, have labored very successfully to elucidate their development.

The anatomy of the teeth and the parts upon which they depend are given, though by no means as fully, as will be found in many recent works, and one gets in a few pages the results of much labor in their elucidation. The abstract of Mr. Goodsir on the development of teeth, with the valuable illustrative drawings are important aids to the correct appreciation of the subject.

After a few words on the diseases of the teeth; the materials for filling claim attention. Gold, tin, and amalgam, are mentioned, with not quite enough emphasis on the superiority of gold over any, and every thing else. Amalgam especially should be discarded as wholly unsuited to occupy a permanent place in the mouth of the patient, if we may rely upon the facts arrayed against its use in the “amalgam controversy” in the dental profession.

Passing over many topics we find a section devoted to the "bad effects of the accumulation of tartar," the full truth of which would require a far stronger portrait than that drawn by our author, for surely if the accumulation of tartar and ulceration of the gums, be the cause of the disgustingly offensive breath we sometimes have to endure for a brief period (and we never examined the mouth of a person having such a putrid, sickening, "stinking" breath, without finding this condition of things,) the sooner they apply to a dentist, the better for themselves and friends; but we cordially pity the operator that has that job on hand, and wish him a good fee as the reward of his labor and endurance.

The tenth chapter is devoted to the important question of extracting teeth, and the instruments to be used. Several drawings and explanations illustrate the mode of proceeding with the "key." Our author says:

"The key consists of four principal parts which have been variously modified, to suit the notions of the inventors or improvers, but the simplest form is yet the best, and will be preferred by the skilful operator. With a little dexterity every thing may be done with the instrument in its simplest form, which can be done by any of the varieties or complications. Dr. Franklin's remark is applicable "I would not give a cent for a workman who could not saw with a gimblet or bore a hole with a saw."

Notwithstanding this saying of the philosopher, we do not consider it a matter of indifference what kind of a key the operator has. True, the key is not all that is required. Tact, address, dexterity, are very important. So is a good instrument.

Forceps are recommended as possessing advantages over the key which undoubtedly is usually true, still we believe most operators occasionally use a key.

Illustrations are given of the different forms of forceps in common use, of which the modifications are almost endless, and there is now no difficulty in procuring these adapted to all varieties of teeth. We believe the forceps are fast displacing the key with the general practitioner (who in a country like ours must extract teeth) as well as the dentist in consequence of their many advantages.

This book contains valuable information for the general practitioner as well as the dentist.

In the mechanical part of the work minute directions are given for the various operations with which every dentist must become familiar, but which would not interest our readers generally.

While containing some things already old, in consequence of the rapid advance of the science and art of dentistry, there is much permanent value, and the thirty plates illustrating various instruments, and teeth, both healthy and diseased, have an interest which will not grow old.

We ought to add that the practical part of the work has the aid and endorsement of Joseph E. Parker, Dentist, Philadelphia. And when the anatomy is from the pen and pencil of Paul B. Goddard, M. D., &c., it needs no further endorsement.

C.

MISCELLANEOUS.

Quinine by Inhalation.—We stated that a year or two ago, a young physician, M. Manetti of Italy, had proposed the introduction of quinine by the lungs, in cases where it could not otherwise be administered. We learn from the New Orleans Med. News and Hospital Gazette, that

“Professor Pignacca has called the new agent for inhalation, *Quinic Ether*, probably for want of a better name, for it is not, properly speaking, an ether, and its positive chemical composition is not known. It is a liquid of a special inconstant odor, and is obtained by the distillation of quinate of lime (*quinat de chaux*) combined with alcohol; and is analogous to the etherial bodies in general, volatilizing like them.

“Professor Pignacca states in his letter that he has administered this fluid by inhalation to eight patients; seven of them had tertian intermittent fever, the last neuralgia of the fifth pair. The neuralgia was of an intermittent type. The remedy acted admirably both in the cases of fever and in the case of neuralgia.

“The quantity of the agent given is about a scruple at a time, repeated three or four times a day. It is administered in the same manner as chloroform, and it produces sensations somewhat similar.”

Death from Chloroform at University College Hospital, London. A death has just occurred in this Hospital; the patient was under the care of Mr. Erichsen. The man was aged 29, and was admitted for retention of urine. A post mortem revealed a large, soft, and remarkably flabby heart, undergoing fatty degeneration.—*Nashville Med. Jour.*

The Sugar-Vapor Treatment of Consumption.—This treatment of the most extensively fatal disease, since its introduction by the celebrated Dr. Cartwright, formerly of Natchez, now of New Orleans, would seem to be doing wonders for the unfortunate consumptive patient. Quite an interesting letter on this subject may be found in the Boston Med. and Surg. Journal for Dec. 20th, written by a lady who considers herself cured by the saccharine vapor of a sugar house on a plantation near New Orleans.—*Ib.*

Spirits of Turpentine and Nitrate Potash in Snake Bites.—Dr. Wm. Hanley, of Napierville, Illinois, reports in the North Western Med. and Surg. Journal some cases of snake bites, one from the rattle snake, which he thinks were relieved by 30 drop doses every half hour of a mixture of spts. turpentine, saturated with nitrate of potash. This was also applied to the wounds and in friction to the limbs bitten.—*Ib.*

Dropsy.—Diuretic Wine.—M. Grand, pharmacien, publishes in the *Repertoire de pharmacie*, for June 1854, the following formula for diuretic wine: sliced bulbs of squill, eight parts; powdered digitalis, eight parts, cancella, twelve parts; acetate of potassa, fifteen parts; Madeira wine, five hundred parts. Macerate for eight days and strain. The dose is half an ounce, which may be increased to a wine glassful daily.—*Ib.*

Died—In Ann Arbor on the 24th of January, Martin Gregg, of Magnolia, Ritnam Co., Ill., aged 30 years.

Also, on the 26th, Horatio S. Ellis of Oberlin, Ohio, aged 22 years.

Messrs. Ellis & Gregg were both members of the medical class of the University of Michigan, and by their gentlemanly and amiable qualities had won the love and esteem of their teachers and fellow students.

Upon the announcement of their decease to the medical class a meeting was called and the following resolutions were adopted :—

Whereas—It has pleased All-wise God to remove from our number by the hand of death, two brothers respected and beloved, therefore,

Resolved—That while we mourn under this sudden stroke of affliction it becomes us humbly to bow before the hand that wields the rod, and meekly to implore the same power to heal and sanctify the wound.

Resolved—That, to the families and friends of the deceased we extend our heart-felt sympathies in this their sad bereavement, and would mingle with their's, our tears of sorrow.

Resolved—That we wear a badge of mourning for 30 days.

Resolved—That these resolutions be published in the city papers and copies forwarded to the friends of the deceased.

W. W. GREEN,
J. T. WOOD,
A. F. WHELAN,
W. C. FISHER,
A. K. WARREN.

Committee of the Medical Class.

Also—In this city, on the 10th inst., Mr. ELLIOTT P. CURTISS, of Kingsville, Ashtabula County, Ohio, aged 24 years.

Mr. Curtiss was a member of the Medical Class of the University of Michigan, and by his studious habits and modest, unobtrusive bearing, has won the respect and friendship of all who knew him.

Upon the announcement to the class of his sudden and unexpected death, a meeting was called and the following resolutions adopted :

Whereas—In the Providence of an All-wise God, another of our number, Mr. Elliott P. Curtiss, has been taken from us by death, therefore,

Resolved—That it is with feelings of the deepest grief we again record the loss of a brother, and while we recognize an overruling power in our repeated afflictions, we also implore that “in the midst of wrath He will remember mercy.”

Resolved—That as a slight consolation in their time of sorrow, we express to the family and friends of the deceased, our sense of the worth of their departed one ; and while we remind them that he has been called from earth, and, we trust, to higher duties and purer enjoyments, endeavor to impress upon our minds the solemn truth, that neither youth nor vigor, talents nor bright hopes, are security against the hand of the destroyer.

Resolved—That we attend his funeral in a body, and wear the usual badge of mourning.

Resolved—That the Michigan Argus be requested to publish these resolutions and copies forwarded to the friends of the deceased.

J. H. WHITE,	}	Committee.
Z. E. BLISS,		
A. K. WARREN,		
J. B. FORD,		
W. D. SCOTT.		

—From the Michigan Argus.

We copy the above obituary notices. We only add that these three gentlemen were among the most promising members of the Medical Class, and that their departure has cast a gloom over all minds.

The disease which took them away was the small pox, which has been epidemic in this region, and which has made havoc in several surrounding places as well as here.—Eds. of Journal.

THE
PENINSULAR
JOURNAL OF MEDICINE
AND THE COLLATERAL SCIENCES.

VOL. II.

APRIL, 1855.

NO. X.

ORIGINAL COMMUNICATIONS.

ART. I.—*The Medical Department of the Michigan University and our Contemporaries.*

From the peculiar position in which we are placed by recent official acts, we are constrained, though reluctantly, to bring before our readers again, matters we would be glad ever to sink in the presence of the deeply important truths of Medical Science.

Our readers will bear us witness that we have avoided allusions to ourselves and to the particular affairs of the Institution with which we are connected, excepting as impelled to it by evident necessity.

Until the issue of the March number we have had very little to say on the subject of Homœopathy, or any other of the various irregular systems of medical practice which are at the present day challenging public attention and soliciting public support. We have ever been of the opinion, as we still are, that these exclusive systems, like the long list which has preceded them, would, if left to their course, flourish their brief day and pass away—that their superstructure of errors and absurdities would be forgotten, and the grains of truth which each might chance to possess would be aggregated to the great mass of scientific knowledge.

Though avoiding to speak much of the Medical Department of the University we have not been unconscious of the fact that the eyes of the Profession throughout the country were turned upon it,—some in envy, but most in hope. We have been aware that its position was new, at least in this country—that it was the only Medical School, on this side of the Atlantic, placed by the liberality of a State upon a basis independent of pecuniary patronage, and consequently free to pursue a course dictated alone by the wants and necessities of the community and the profession. We have been aware also of the uncertainty and instability of popular feeling—of the many influences which might be brought to bear upon a large body of men, such as the Legislature of a State, dependent for their position upon a variety of issues, and who, however pure in their motives and enlightened on general subjects, are still comparatively ignorant of Medical science, of the feelings of the Medical Profession, and of the relations and necessities of a Medical School. In the multitude of Legislative acts, and the short time of forty days in which they are to be performed, it is not expected that the Legislature can give every subject a calm and full consideration, and matters of the nature of the late Act are entrusted to the care of committees, who will of course report in the absence of instructions in accordance with their individual inclinations and views, whatever they may be.

The framers of the Constitution of our State, knowing the importance of an established system of management in regard to the University, and being aware of the state of things we have above referred to, placed the entire government of that institution in the hands of a separate body of men, more limited in number, elected for a long term of service, and having no other official duties to perform; and who it is supposed will make themselves familiar with all the relations of the subject of their charge, and of its necessities and wants. On the wisdom of this policy, and upon the good sense and honest purposes of the Board of Regents, we have rested in the greatest confidence, and we are happy to say that we have seen nothing to shake in the slightest degree that confident trust; and we hope after the present flurry has passed by, to be able to give our columns again entirely to the cause of Medical Science, and our time and thoughts in connexion with the Medical College, to giving the best and fullest scientific and practical instruction to those under our care, of which we are capable. If we now step aside from our main object to give at-

tention to these other matters forced upon us, our readers may be assured that as soon as possible, we shall again return to the calm and even tenor of our ways.

Some of our cotemporary journals, which have reached us, and whose editors had received intelligence of those recent official acts before their March issue, have noticed these occurrences, but in various tones.

The *North Western Medical and Surgical Journal* says :

"We learn from various sources, that the Legislature of Michigan at its late session, passed an act requiring the Board of Regents of that State, to appoint a Professor of Homœopathy in the Medical Department of the State University at Ann Arbor. Whether the Regents will obey this act of folly, and thereby destroy the Medical Department of their State University, remains to be seen."

The *Western Lancet* of Cincinnati, edited by a Professor in the Medical College of Ohio, has reached our table just at this moment, alluding to this subject, and to our journal in a most bitter and improper manner. While for our determined course in opposition to all exclusive systems, we are set upon by all the yelping pack of quackery let loose, this professional brother (!) most unjustly as we think, accuses us of apologising for irregularities in Medical Science, and soundly berates us for advising our professional brethren to

"Seize on truth wherever found
On foreign or on native ground."

We cannot say how much his feelings may have been disturbed, by the small number of students in attendance upon the school with which he is connected, and how far this will account for the injustice of his accusations, but we fear he has a constitutional repugnance to the article which he abuses us for advising others to seize. We shall be obliged to regard this conclusion as settled, if, when the editor comes to understand our position, and reads again the article he has condemned, he does not retract or modify the harsh statements he has made. We hope he will see that by some means he has been led into a mistake, and put himself right, as we would like to regard him, and all others laboring in the same cause, as gentlemen and honest men.

The *Buffalo Journal*, which hitherto has ever been ready to send a dart dipped in the bitterness which unsuccessful rivalry engenders, but whose darts have always been returned upon its own head by the impenetrable

shield which surrounds us, until, to use its own confession, it was "just tottering to defeat," but by this act of the Legislature, and by a certain "report," possessing a sort of official character, concocted by men defeated in their hopes, and smarting under the loss of *honors* or powers and emoluments, either anticipated or previously possessed—the Journal by this act of the legislature, and this report, which, by the way, is harmless among those who understand the circumstances connected with its origin, has broken again its silence, and thinks it has found "confirmation strong as Holy Writ of our (its) prophecies of evil." It farther says:

"Admitting, as we do, most cordially, that the Medical Faculty of the Michigan University is mostly made up of men of zeal and attainment, amply qualified as teachers, it is nevertheless true that above these men are others, destitute of all attachment or veneration for medical science, who have the power to control the associations, if not the acts of the medical professors."

It inquires: "What are these professors to do? In the event of their resignation, what becomes of all their hopes of a great medical reform commencing at Ann Arbor? To resign is to give up a pleasant residence a decent salary, and to abandon their cherished school to the control of Quacks. To remain is to submit to an insult degrading beyond measure, and to suffer under the consciousness that next year the Eclectics will be entitled to professorship."

The Journal closes its article by saying: "We look upon the fulfillment of our predictions as a calamity which we ourselves would have labored strenuously to avert, and which subjects men whom we honor and respect to a most painful alternative."

It must be borne in mind that this article was written and printed before the March number of the *Peninsular Journal* reached Buffalo, and it reminds us of some obituary notices we have seen, written under erroneous telegraphic reports, and while the subjects of them were alive and kicking. Such notices, when written by opponents and rivals often are in a strain which scarcely harmonizes with the tenor of previous effusions, but which show more truly the real sentiments and the manly heart. We really feel obliged to the editor of the Journal for his good opinions of the University and its professors, and would suggest to him that if he had always been as frank in his expressions as he has now, he would have avoided some of those "sore-headed rejoinders" of which he has so lively a remembrance, and which even still he seems to apprehend.

[We have great pleasure in referring our new friend to the March number of the *Peninsular Journal*, where he will learn what we now more explicitly state, that "the men who are above us and have the power to control our associations, are *not* destitute of all attachment or veneration for medical science." We are happy to say, and we hope it will allay the regrets of the Buffalo and all other friends of the medical department of the University of Michigan, and of a "great medical reform," that the men who have been elected by the people of Michigan to control the University, have both an attachment to, and a veneration for medical science, and will not subject the men whom the editor of the Buffalo Journal so much honors and respects, to the "painful alternative he would have so strenuously labored to avert."

We are daily seeing new evidences of the profound wisdom of the great poet of human nature, and would suggest to Dr. Hunt that when he next quotes from Shakespeare he carefully consider the context. It will doubtless be worth his study. If in the present instance he had remembered the whole passage, and the desperate state of mind of Othello, of whom it was spoken, he would have found that,

*"Trafles light as air,
Are to the jealous, confirmation strong
As proof of holy writ;"*

and he might have hesitated before giving so much consequence as he he seems to have done, to the report of the chairman of the board of visitors, which we in Michigan understand better how to appreciate; and if his grief be not a luxury, might have saved himself a considerable amount of painful condolence.

One other of our cotemporaries deserves to be noticed, but the present article has already grown to such a length that we are unable at present to do it justice.

ART. IV.—*Indian Hemp.—Its utility in Uterine Diseases.*

MESSRS. EDITORS :

I take the liberty of appearing in your journal, not because I want to be seen or heard, but for the reason I want to add what little mite I have to the largely accumulating stock of medical facts. No doubt from the heading of my article you may have some anticipations of my story, but however, I say to you, as they say out west, "keep cool." In the first

place I have never known or seen it stated in any book that the *apocynum cannabinum* was ever useful in uterine diseases, and as the organ is generally a great source of complaint out here, and even in the east, I want to give the profession the hint that they may go on with the enquiry. You know, sir, that often the uterus becomes irritated and is left in a very congestive state, always ready to engender every species of disorders that can attack it either in the pregnant or unpregnant state. My statement shall be facts and facts only, as I have no theory to advance or maintain. My first case was that of a woman of 32 years of age, and the mother of five children. Some four years ago last month, I was called on to see her in the night about 10 o'clock, on my arrival at the house, I found her with her pulse small, weak and about 90 per minute, stomach irritable with continual vomiting, that organ ejecting every thing taken in it hæmorrhage copious and tenderness over the uterine region. I made sundry enquiries, cross questioned her and her husband pretty closely, and came to the conclusion that she had taken some irritating drug or drugs to bring on miscarriage. I made use of the treatment generally adopted for such a case, even to slight *ptyalism*. My treatment up to the sixth day was unavailing and my patient got worse gradually, till I began to doubt her recovery. In this state of despair, as you may call it, I pondered over in my mind every remedy that showed any prospect of utility in her case, but had used most of them, and the remainder I did not believe in. While in this mood I went out of the house saddened to despair, I walked a bit across the lot as the snow had all gone off, (it was during a thaw,) I by chance saw some Indian hemp growing in a wet place, thinks I to myself, I will try this weed, so I dug 3 or 4 roots, took them to her house, and had them washed, then I chipped them up and boiled them in a teacup of water till one-third of the fluid was gone, and gave her a teaspoonful every three or four hours. The abdominal aorta did beat in this case with the force of a forge hammer. I left, and on the next visit a lapse of about sixteen hours, I found her some better, pulse less irregular and the throbbing of the aorta smewhat diminished and her countenance more natural. I ordered more of the hemp to be dug and to use it as before, and on the fifth day after I commenced using it, I found all the unpleasant symptoms gone and her convalescence about to be established. Since then I have used it in more than fifteen cases.

The next case I shall call your attention to was that of a female of about twenty-two years of age, she was the mother of two children. I was called in counsel with the attending physician. She had then

been under his care nine days. He had despaired of her recovery and advised her friends of his doubts. On my arrival I felt the abdominal aorta throbbing like a forge hammer, tenderness over the uterus vagina dry and tender, sordes collected on the gums and teeth, tongue black, or dark brown more likely, tympanitic, and in this case, as in the first, which I forgot to mention, tormenting headache. My friend informed me of his treatment, with which I could find no fault, as it was on the general plan. I told him, that in such cases I generally used the apocynum. So I chipped up about two drachms and boiled it in 4 ounces of water, and ordered a teaspoonful every three or four hours. On our arrival the next day the headache was diminished, pulse more natural and soft, and the abdominal aorta less vehement in its thumping, uterine region less tender, and tongue, gums, and teeth, less scaly. She continued to mend, and in a week was able to sit up. The woman was afterwards rugged and tough. The third case was that of a female about thirty-four years of age, and the mother of six children, I was called to see her on the eleventh day of her illness, in council with a neighboring physician. She for sixteen months after her confinement had no "turns," her child died when it was four months old from pneumonia. Four month before this attack of sickness, she was ailing, and her physician called it the "turn of life," &c. She was taken with chills and fever a pain in her head, vomiting and pain across her loins. Her doctor called it some kind of a fever. On my arrival I found her rather low, pulse 110 quick, and small eyes dull and sunken, breathing rather hurried, tympanitic headache, and the abdominal aorta thumping at an awful rate. I advised the doctor to drop his treatment and told him that I would prefer using the apocynum. So we agreed to it and boiled up half an ounce in half a pint of water for half an hour or less, and gave a teaspoonful every three or four hours. On the following day I returned after a lapse of 24 hours and found her rather better, in a week all the bad symptoms were gone. This woman is now well and has born two more children.

The last case that I will dwell on is that of a Mrs. C., aged 36 years, mother of four children. Last fall was called to see her on the fourth day of her illness, she was then rather low, pulse about 95, head hot, and ached, eyes dull and sunken, great thirst, pain over the uterus vagina hot, dry and tender, and the abdominal aorta beating furiously. I gave her a dose of sulphate of morphine and continued it every four hours till my return, as she was very nervous. In about sixteen hours after I returned and found her no better, rather affected slightly by the morphine and the stomach inclined to be troublesome. I gave her the Indian hemp, then every three hours as usual, she in four days had got over all her bad symptoms and quickly recovered. The Indian hemp in my opinion is a valuable remedy in pneumonia. In my next article I will give you my views of its operation.

I remain yours, respectfully,

N. B., M.D.

ARR. IV.—*Meteorological Observations made at Detroit, for the Month of January, 1855.* By Rev. Geo. DUFFIELD, D.D.
Latitude, 42° 24' N. Height of station above the sea 620 feet above tide at Albany.

Days of Week.	Barometer.			Attached Thermometer.			Open Air Thermometer.				Clouds, their course and velocity.				Wind, direction & force.			Rain & Melted Snow		
	7 a.m.	3 p.m.	9 p.m.	H. C.	H. C.	H. C.	7 a.m.	2 p.m.	9 p.m.	7 a.m.	2 p.m.	9 p.m.	Hour Began	Hour Ended	Ant. Inch's					
Monday	29.75	29.79	29.79	50	62	62	28	36	34	32.6	8	Stratus	10	Stratus	19	Cu. Stratus	E. 1	E.N.E. 2	E.N.E. 2	
Tuesday	" 81	" 81	" 81	60	64	62	40	54	48	47.3	8	Str. & Hazy	3	Stratus	5	Stratus	S.W. 1	S.W. 1	S.W. 1	
Wednesday	" 84	" 81	" 72	56	65	62	33	50	51	51	3	do.	5	Hazy & Cu. S.	10	Cu and Str.	S.W. 2	S. 1	S. 1	
Thursday	" 82	30.02	30.10	54	58	52	23	29	29	29.3	10	Cu. Str.	10	Stratus	10	Stratus	W.S.W. 3	N.N.W. 1	N.N.W. 1	
Friday	30.16	30.04	29.84	57	62	58	27	32	34	31	10	do.	10	Cu. Stratus	10	Stratus	E.N.E. 3	E. 2	E. 2	
Saturday	29.67	29.61	29.54	55	59	54	42	58	58	56	10	Stratus	10	Stratus	10	Stratus	W. 3	W. 3	W. 1	
Sunday	29.67	30.12	30.31	54	54	57	34	28	25	29	10	do.	10	Stratus	11	Clear	S.W. 1	S.S.E. 1	S.S.E. 1	
Monday	30.38	" 28	" 16	52	61	54	27	36	32	31.6	0	Clear	2	Cu. Cir. & S.	3	Stratus	S. 1	W.S.W. 1	W.S.W. 1	
Tuesday	" 05	" 09	" 01	52	62	55	28	32	31	27	10	Stratus	3	Stratus	10	Stratus	E.N.E. 2	E.N.E. 1	E.N.E. 1	
Wednesday	" 16	" 01	29.77	62	60	55	32	38	36	36	10	do.	10	do.	10	do.	S.W. 1	S.W. 1	S.W. 1	
Thursday	29.51	29.37	" 23	60	60	58	40	43	46	43	10	do.	10	do.	10	do.	N.E. 4	N.W. 1	N.W. 1	
Friday	" 26	" 18	" 03	57	52	54	29	21	20	20	10	Clo. Stratus	10	do.	10	do.	S.W. 1	S.W. 3	S.W. 3	
Saturday	" 21	" 49	" 43	43	45	46	6	18	22	15.3	10	Stratus	10	do.	10	do.	S.W. 1	S.W. 1	E.N.E. 1	
Sunday	" 83	" 65	" 43	40	51	53	25	35	28	29.3	10	do.	10	Clear	10	do.	S.W. 2	E. 1	E.N.E. 1	
Monday	" 43	" 44	" 49	50	51	57	55	28	31	30	26.6	10	do.	10	do.	10	do.	S.W. 2	W.S.W. 1	W.S.W. 3
Tuesday	" 50	" 57	" 48	48	51	57	36	42	37	38.3	10	do.	6	Cu. Stratus	10	do.	W. 2	W. 2	E.N.E. 2	
Wednesday	" 25	" 29	" 33	58	56	54	28	31	28	29	10	Cu. Stratus	10	do.	10	do.	S.W. 1	E. 1	E. 1	
Thursday	" 45	" 49	" 53	56	56	54	28	31	28	28	10	Stratus	10	do.	10	do.	E.N.E. 1	W.S.W. 2	N.N.W. 1	
Friday	" 56	" 46	" 33	49	56	54	26	30	32	31.6	11	do.	10	Stratus	10	do.	E.N.E. 4	N.E. 3	E. 1	
Saturday	" 18	" 30	" 47	49	57	60	28	35	32	28.3	10	do.	10	Cu. Str.	10	do.	W.S.W. 3	W.S.W. 5	W.S.W. 3	
Sunday	" 28	28.87	28.62	55	55	55	27	28	32	28.3	10	do.	10	do.	0	Clear	S.W. 1	S.W. 3	W.S.W. 1	
Monday	" 28	28.88	29.43	42	47	48	20	18	6	14.6	10	do.	6	Stratus	0	do.	W.S.W. 1	W.S.W. 1	W.S.W. 1	
Tuesday	" 55	" 55	" 58	40	50	49	12	23	17	17.6	10	do.	10	Stratus	0	do.	S.E. 1	E. 1	N.E. 1	
Wednesday	" 63	" 61	" 63	40	50	49	12	23	17	17.6	10	do.	10	Stratus	0	do.	N.E.	N.N.W.	N.N.W.	
Thursday	" 50	" 27	" 04	42	52	55	15	18	20	14	17.3	10	do.	10	Snow	10	W.S.W.	W.N.W. 1	W.N.W. 1	
Friday	" 07	" 10	" 27	52	55	52	13	22	17	17.3	10	do.	10	Snow	10	Stratus	N.E. 1	E.N.E.	E.N.E.	
Saturday	" 28	" 27	" 27	50	56	52	15	22	22	19.6	10	Snow	10	Snow	10	Snow	N.E. 1	W.S.W. 3	W. 1	
Sunday	" 18	" 10	" 01	51	57	59	15	24	27	20	23.6	10	do.	10	Stratus	10	do.	W.S.W. 2	W.S.W. 3	W.S.W. 3
Monday	28.87	" 04	" 22	50	56	54	16	23	18	19	10	Stratus	10	do.	10	do.	W.S.W. 1	W.S.W. 1	W.S.W. 1	
Tuesday	29.40	" 49	" 71	48	46	53	16	23	24	22.4	10	do.	10	do.	10	do.	W.S.W. 1	W.S.W. 1	W.S.W. 1	
Wednesday	" 80	" 78	" 71	46	52	55														
Sums	914.61	916.08	917.39				820	970	871											
Means	29.345	29.575	29.465				28	35	31.5											

DAILY REMARKS ON THE WEATHER.

	January.	February.
1	Heavy white frost. A fine day.	Snow 1 inch.
2	An exceedingly fine day.	
3	A very fine day. Rain in the night.	Snow 7 inches.
4		
5	Began to sleet and turned to rain.	
6	A violent gale through the day.	Excessive cold day.
7	Snowing, and rain in the clouds from	Snow storm through day. Snow 6 inch.
8	[10 to 12.	
9	A bank of clouds along the horizon	
10	[from sunrise till 8 a.m. White frost	
11	Snow 3-4 inch.	Snowing from 8 p.m.
12		Snow 1 inch. Fine fair day.
13	Snow 3-4 inch. Snowing more.	Snow 2 inches.
14		Thawing. Began to rain at 10 a.m.
15	Began to snow at 9 p.m.	
16	Snow 1 1-4 inch.	
17		Snow 3-4 inches.
18		Snow 3-4 inches.
19		
20	Snow 3-4 inch.	
21	Snowy. Snowing heavily at 2 p.m.	
22	Snow 3 inches.	
23		White frost.
24		Snow 3 inches.
25	Snowing.	
26	Snow 12 inches.	
27		
28	Snow 4 inches.	
29	Snow 6 inches.	
30	Snow showers.	
31		

RESULTS FOR JANUARY.

BAROMETER.	THERMOMETER.
Gen. Average.... 29.550.....	31.5
Maximum..... 30.36.....	58 ..6th.
Minimum..... 28.33.....	4 ..23d.
Range..... 2.03.....	54
Gen. Mean..... 29.34.....	31

RESULTS FOR FEBRUARY.

BAROMETER.	THERMOMETER.
Average.... 29.791	Average.. 37.734
Maximum.. 30.02	40 ..13th.
Minimum.. 29.17	0-14 ..6th.
Mean..... 29.595.....	13
Range..... .85	54
Rain.... 1.550	

SELECTIONS.

From the North Western Medical and Surgical Journal.

A list of the principal Medical Plants enumerated by Botanists, and known to be growing in Northern Illinois and Wisconsin; with a slight notice of some of their medical properties. By STEPHEN W. WILLIAMS, M. D., late Professor and Lecturer upon Materia Medica, Medical Botany, in Dartmouth, N. H., Medical College, and in the Medical University of Willoughby, Ohio, formerly of Deerfield, Massachusetts, now of Laona, Winnebago County, Illinois.

The study of Medical Botany is now engaging the attention of medical men throughout the United States. It is very far from being confined to the self-styled botanical physicians, or empirics, as they are emphatically and most appropriately called, who rarely take the trouble to investigate the properties of any plant. They derive most, if not all their boasted information on this subject from the researches of regular physicians.

The resolution adopted by the American Association at Philadelphia, in May 1847, turned the attention of American Physicians to this subject. A committee was appointed with N. S. Davis, M. D., as chairman, who made a short report upon it, which was followed by two long reports, the one by Francis P. Porcher, M. D., of Charleston, S. C., containing 174 pages, royal octavo, and giving an account of more than five hundred medical plants growing in the neighborhood of South Carolina; the other by myself, in a communication containing a list of about three hundred and twenty indigenous medicinal plants growing in Massachusetts, giving an account of their medical properties. Others have given lesser reports in the transactions of the Association, and the medical periodical publications of the day, showing that a growing interest is felt on the subject by our educated physicians.

The field for observation on this subject is vast, and as yet but little explored, particularly in the boundless West, which, comparatively speaking, is just beginning to be populated. The studies of physicians more naturally incline them to the cultivation of the science of natural history, than those of any other class of men; consequently they have done more towards enlarging its boundaries than any other. Their rides in thickets and forests, and in the open grounds, give them great opportunities for investigating this branch of knowledge.

Suffer me in this place to give an extract on this subject from the address of the father of American physicians, the immortal Rush, delivered before his class in the University of Pennsylvania in the year 1789, nearly sixty years ago. It loses none of its value or significance by age.

It also gives a spur and impetus to exertion in other branches of knowledge.

"Let me recommend to your particular attention the indigenous medicines of our country. Cultivate or prepare as many of them as possible, and endeavor to enlarge the materia medica, by exploring the untrodden fields and forests of the United States. The ipecacuanha, the Seneca and Virginia snakeroots, the Carolina pink-root, the spice-wood, the sassafras, the butternut, the thoroughwort, the poke, and the stramonium, are but a small part of the medicinal productions of America. I have no doubt but there are many hundred other plants which now exale invaluable medicinal virtues in the air. Examine likewise the mineral waters, which are so various in their impregnation, and so common in all parts of our country. Let not the properties of the insects of America escape your investigation. We have already discovered among some of them, a fly equal in its blistering qualities to the famous fly of Spain. Who knows but it may be reserved for America to furnish the world from her productions, cures for some diseases which now elude the power of medicine? Who knows but at the foot of the Alleghany mountains there blooms a flower that is an infalable cure for the epilepsy? Perhaps on the Monongahela, or the Potomac, there may grow a root that shall supply by its tonic powers the invigorating effects of the savage or military life, in the cure of consumption. Human misery of every kind is evidently on the decline. Happiness, like truth, is an unit. While the world, from the progress of intellectual, moral, and political truth, is framing a more safe and agreeable abode for man, the votaries of medicine should not be idle. All the doors and windows of the temple of nature have been thrown open by the convulsions of the late American revolution. This is the time therefore, to press upon her altars. We have already drawn from them discourses on morals, philosophy, and government, all of which have human happiness for their object. Let us preserve the unity of truth and happiness, by drawing from the same source, in the present critical moment, a knowledge of antidotes to those diseases which are supposed to be incurable."

For my knowledge of the location of the principal part growing in this section of the country, I am more indebted to a manuscript containing a list of the plants of Wisconsin, by my friend Dr. S. Lathrop, recently Professor in the Beloit College, now a Professor in the Wisconsin University at Madison, than to any other source. I believe this catalogue has recently been published in some of our western periodical journals. I have also received valuable information from Lapham's History of Wisconsin, I also avail myself of my own observations in a more limited sphere, during a short residence in this section of the country. The accounts of the medical properties of the plants enumerated, is from my own researches into the various authorities which have presented themselves to my notice, and this has been the principal labor of the undertaking. After all, but little new may have been elicited, but it will serve as a condensed reference to the medical plants of this section of the west. I have omitted the names of my authorities for the medical properties

of the plants enumerated, as it would extend my communication to an indefinite length. I refer the artificial classification of the plant of the Linnian arrangement thus, for the sake of abbreviation, Class 1. Order 13. I say, 1, 13. And for the natural order for Rubiaceæ, for instance I say, N. O. Rubiaceæ, &c. I trust that most physicians have botanical works describing the plants in their particular locations, and it will be easy from this arrangement to refer to them. I have preferred the alphabetical arrangement to the natural or Linnian one, on account of the facility it gives in looking for the plant.

1. *Abies Balsamica*, Balsam of Fir. 20, 16, N. O. Coniferae.

This beautiful tree, one of the most beautiful in the American forests, and one which should adorn our door yards more frequently than it does, yields a pellucid balsam which is expectorant, vulnerary, and slightly stimulant. One part of this balsam, and two of spirits of turpentine forms an elegant transparent varnish for pictures and paper.

2. *Abies Canadensis*, Hemlock tree. Class and order as above, stimulant; branches used in fomentations—used in tanning.

3. *Abies nigra*. Black Pine, Spina, class and order as above, stimulant, diuretic. The oil of Spina is obtained from this.

4. *Abies* or *Pinus Strobus*. White Pine, class and order the same. Most valuable for timber, the bark used for peltices in the piles, stimulant.

The genus *Abies* taken from *Pinus*. Except in the pineries of Wisconsin, pines are scarce and timber high.

5. *Abutilon Avicennæ*. Indian Mallows, N. O. malvaceæ, emollient.

6. *Acer Saccharinum*. Sugar Maple, Mountain Maple, 8, 1. Its principal medical quality is the sugar which it yields.

7. *Acer Rubrum*. Red Maple, 8, 1. A good ink is made from it by boiling with sulphate of iron. Decoction useful in sore eyes.

8. 9. *Actæa Rubrum et Alba*, Cohosh, 13, 1, N. O. Ranunc., tonic, expectorant and nervine.

10. *Achillea Millefolium*. Yarrow, milfoil, N. O., Artracii. Antispasmodic and tonic.

11. *Acarus Calamus*. Sweet Flag, 6, 1, n. o., orontides. Aromatic, stimulant, used in dyspepsia and as bitter tonic.

12. *Adiantum Pedatum*. Maiden hair, rock fern, cryptogamia. Aromatic and slightly astringent. A soothing syrup for coughs is made from this plant somewhat similar to the syrup de capillaris.

18. *Anemone Nemerosa*. Wood, anemone.

19. *Anemone Virginea*. Wind Flower.

20. *A. Pennsylvanica*, Anemone. 13, 13, N. O. Ranunc. Properties alike, used in cutaneous affections. It is acrid and irritating, and sometimes used as a substitute for Spanish flies.

21. *Amphiocarpæ Monarca*. N. O. Leguminous, esculent.

22. *Agrimonia Eupatoria*. Common Agrimony, 12, 2, tonic, laxative and febrifuge.

23. *Alnus Serrulata*. Common Alder, 20, 4, N. O. Amentiacæ. Leaves bitter and astringent. I have found a decoction of the bark of

this shrub a most valuable remedy in Hæmaturia. It is also good in other hemorrhages.

24. *Alnus Incarnata*. Same class and order. Astringent.

25. *Allium Canadense*. Wild Onion. 6, 1, stimulant diuretic, and laxative. Similar in its properties to the common onion.

26. *Amaranthus Altissimus*. Prince's Feather, }
27. *Amaranthus Hybrides*. Lovely Bleeding, } 20, 5, Both these

plants are considered to be useful in the hemorrhages, particularly in the uterine hemorrhage.

28. *Alisma Plantago*. Great Water Plantain, 8, 13, irritant; stimulant. It was formerly considered in Russia to be almost a specific in hydrophobia, but it is not now much used for this purpose.

29. *Ambrosia Trifida*. Rich weed. This weed was used by the Indians to make ropes. Employed in after-pains in labor, nervine.

30. *Arctium Lappa*. Burdock, 6, 1. Diaphoretic, diuretic, sudorific.

31. *Andromeda Polifolia*. Andromeda. Irritant, errhine.

32. *Aquilegia Canadensis*. Columbine, 13, 5, N. O. Ranunc. Laxative, Diuretic.

33. *Apios Tuberosa*. Ground Nut, 17, 10, N. O. Leguminosa. Esculent, somewhat similar to the potato.

34. *Aralia Nudicaulis*. Spikenard, 5, 5, true spikenard.

35. *Aralia Racemosa*. False Sassaaparilla, 5, 5.

Both these species are mild stimulants, aromatic, etc., expectorant. A syrup of these plants is much used in coughs. The bruised root in wounds and old ulcers.

36. *Aralia Spinosa*. Prickly Ash. Class and order the same. Highly stimulant, irritant, diuretic. Used much in rheumatism, toothache, etc.

37. *Arabis Canadensis*. Cress. Stimulant, edible.

38. *Archangelicæ, Atropurpurea*. Archangel, 5, 2, N. O. Umbellif. Sometimes mistaken for Cicuta or poison hemlock, as it is somewhat similar in appearance. Carminative, stimulant, stomachic.

39. *Artemisia canadensis*. Wormwood, 18, 2, n. o. corymbifera. The powder of the root has been much used in epilepsy, a most valuable discutient, and much used in fomentations, in wounds and bruises.

40. *Arbutus uva ursi*. Bear berry. *Uva ursi*. 1, 10, n. o. Ericæ. Diuretic, tonic, astringent.

41. *Apocynum and rosæmifolium*. Ipecac. Dog's bane. 5, 2, n. o. Apocynæ, emetic, cathartic, &c.

Apocynæ cannabinum. Indian Hemp, 5, 2, n. o. Apocynæ, Emetic, cathartic, and diuretic.

43. *Asclepias, cornuti*. Milk weed, Silk weed, 5, 2, } Emetic.

43. *Asclepias incarnati*. Silk weed, 5, 2, } Cathartic.

44. *Asclepias tuberosa*. Pleurisy root, butterfly weed, 5, 2, Pectoral, carminative.

45. *Asarum Canadense*. Canada snake root, wild ginger, 12, 1. Aromatic stimulant, and diuretic.

46. *Arum tryphyllum*. Wild turnip, Dragon root, 20, 13, n. o. Aroidæ, expectorant, carminative, diuretic. The root loses much of its causticity in drying.

47. *Asplenium thalictroides*. Spleen root. cryptogamia. astringent, pectoral, and diuretic.
48. *Aster macrophyllus*.
49. *Aster macrophyllus*, } Aster, star flower, 8, 2, n. o. Asteracæ
Used in cutaneous eruptions, and as an
50. *Aster Nor-Angleæ*, } ecboic.
51. *Avena Strictus*. Wild oats, 3, 2., n. o. graminacæ, dietetic, expectorant.
52. *Asparagus officinalis*. Asparagus, 6, 1, n. o. asparagi, dietetic, and diuretic.
53. *Betula papyracea*. White birch, 20, 13, n. o. amentacæ, astringent, diuretic.
54. *Baptisia tinctoria*. Indigo plant, n. o. Leguminosæ, emetic, cathartic.
55. *Brassica pelata*. Water shield, 2, 1, mucilaginous, like the lichens.
56. *Bidens, fondosa*, } 18, 2, n. o. corymbiferae. An infusion of
seeds formed into a syrup with honey, good in
57. *Bidens cernua*, } hooping cough.
58. *Bronn ciliatus*. Chess, 2, 2. A noxious plant among wheat. Purgative, sudorific, and diuretic.
59. *Botrychium fumarioides*. Rattlesnake fern, cryptogamia. Mild astringent.
60. *Calla Palustris*. Water arum, 20, 13. Acrid, stimulant like the wild turnip. It loses its causticity by drying, and is then eaten in Sweden for bread.
62. *Caltha palustris*. Cowslip, 13, 13, n. o. Ranunculacæ. Esculent when boiled young in the spring; later acrid. It sometimes kills cattle.
- Cardamine rhomboidum*. L. Ladies smock. Roots, purgative, diuretic, and nervous, *cardamine pratensis*.
63. *Callytriche verna*. Water chickweed, n. o. callitrichiana. Highly diuretic, and useful in dropsy.
64. *Cana alba*. Perhaps the Juglans, butternut, n. o. Juglandicæ. From the butternut a most valuable cathartic is extracted, which is much in use in domestic practice.
65. *Carex arva*. Sedge. L. This genus is very extensive. Edible, stomachic, diuretic, especially those with odorous roots.
66. *Carpinus virginica*, Vel *ostrea*, n. o. carylaceæ. It affords a grateful food for cattle. The wood is very hard and white, and burns like a candle. It dies yellow.
67. *Cassia chamachristus*. A species of senna, 10, 1, n. o. Leguminosæ, cathartic, laxative.
68. *Caphalantus occidentalis*. Button wood. L. Tonic febrifuge, cathartic.
69. *Ceanothus Americanus*. New Jersey tea root, 5, 1, n. o. Rhana-cæ. Astringent, used for apthous sore mouth; used as a substitute for tea during the revolutionary war.
70. *Celastrus scandens*. False bitter sweet, 5, 1, n. o. celastracean. The bark is emetic and dyscutient. Useful in discussing tumors and swellings in the bags of cows.

71. *Celtis occidentalis*. Hackberry, 5, 1, n. o. Amentacæ. Anodyne, refrigerant. The berries eaten in dysentery.

72. *Cicuta Maculata*. Wild poison Hemlock, 5, 2, n. o. Umbelliferæ. A narcotic irritant poison like the conium.

73. *Cicuta bulbosa*. Same class and order. Properties the same.

74. *Circæ lutitiana*, enchanted night shade, 1, 2, n. o. Labiatæ, used in enchantments in druidical ages, like the mummary of animal magnetism.

75. *Claytonia Virginica*. Pigroot. L. Antiscrophulous in cataplasms.

76. *Clematis Virginiana*. Clematis, 3, 13, n. o. Ranunculacæ. Very acrid, and employed as a caustic. Its fibres make paper.

77. *Cimeifuga Eacemosa*. Cohosh. Black snakeroot, n. o. Ranunc. Tonic, and expectorant. Much used in consumptive complaints.

78. *Chimaphyla umbellata*. Altered from *Pyrola*. Spotted winter-green. Diuretic and tonic, much used in dropsy.

79. *Chilone glabra*. Snake head, 14, 2, n. o. Peronata. Bitter tonic.

80. *Chenopodium albam*. Worm seed. Jerusalem oak, 5, 2, n. o. Chenopodiacæ. Anthelmintic, expectorant, and emmenagogue.

81. *Chenopodium hybridum*. Class, order, and properties the same.

82. *Crataegus coccinea*. Thorn bush, 12, 2, astringent, anti-emetic stomachic.

83. *Conium maculata*. Poison hemlock, 5, 2, n. o. Umbelliferæ. Anodyne, acrid, and extremely poisonous. I have seen the best effects from this in cancerous ulcerations, from using the bruised leaves in poultices.

84. *Cornus alternifolia*, } 4, 1, n. o. Hedera.

85. *Cornus circinata*, } Different species of Dogweed.

86. *Cornus seriocca*, } All tonics, and pretty good substitutes for

88. *Cornus paucifolia*, } Peruvian bark. Cernein has been made

89. *Cornus Canadensis*, } from *Cornus Canadensis*, little inferior to Quinine.

90. *Coptis trifoliata*. Gold thread, Mouth root, 13, 13, n. o. Ranunc. Tonic, stomachic, and detergent. Much used in the apthous sore mouths of children.

91. *Coreopsis*. Tickseed. L. Used as a red dye by the Indians.

92. *Corylus Americana*. Hazle-nut, 20, 13, n. o. Amentaciae. The fruit is said to be good in inflammation of the kidneys. The oil is used in toothache.

93. *Clintonia borealis*. L. Vulnerary in a decoction of the leaves.

94. *Chara vulgaris*. Water feathers. L. Anti-spasmodic and vermifuge.

95. *Convallaria multiflora*. Great Solomon's Seal, 6, 2, n. o. Asparagin. I have seen the best effect in hemorrhoids or piles from a syrup made of four ounces of the dried root of this plant, one quart of water, simmered to a pint, add a pint of molasses and simmer. Dose, a wine glass full three times a day.

96. *Chrysosplenium*. Water carpet. L. Aperient corroborant.

97. *Cuscuta gronovir*, Dodder, 5, 2, Bitter, and astringent.

98. *Cipressus thyoides*. White cedar. L. Infusion of the wood stomachic. The oil used in rheumatism.

99. *Cynoglossum officinale*. Hound's tongue, 5, 1. Demulcent and sedative. Used in Noemaphysis.

100, *Cypripedium pubescens*.

101, *Cypripedium parviflorum*,

102, *Cypripedium spectabile*,

} Ladies slippers, 19, 2, n. o.
Orchideæ. All most used as
a nervine by the botanic phy-
sicians and quacks as an anti-
spasmodic and nervine. They
call it Nervine, America Val-
erian. I can see but little
efficacy in it.

103, *Cyprus oleandrus*. Bull rush; cryptogamia, diuretic.

104. *Datura stramonium*. Common Thorn apple penn, 5, 1, n. o. Solaneæ. This is one of the most powerful of our narcotics, and an acrid poison.

105, *Diervilla trefida*. L. Yellow diervilla; antisyphitic, diuretic.

106, *Delphinium consolida*. Larkspur, 13, 3, n. o. Ramunc Vulnerary, anti-spasmodic, diuretic.

107, *Dentaria laciniata*. Tooth root, L. aromatic and stimulant.

108, *Dirca palustris*. Leather wood, Moose wood, 8, 1, n. o. T. Thymelæ. It is emetic, cathartic, rubifacient, and epispassic.

109, *Drosera rotundifolia*. Linden L. Pectoral, and used in asthma.

110, *Elymus Virginicus*. The seeds eaten like bread.

111, *Equisitem arvense*. Horse tail, } Cryptogamia; both of them

112, *Equis. hyemale*. Scouring rush. } excellent diuretics.

113, *Erythronium dens canis*. Adder's tongue, 6, 1, n. o. Libaiar. The root when dry is farinaceous; when green, emetic, acrid and stimulant.

114, *Euonymus atropurpurea*. Spindle tree, L. Fruit emetic, diuretic in powder, good for the ich.

115, *Eupatorium perfoliatum*. Thoroughwort, boneset, 8, 1, n. o. Compositæ. This is undoubtedly one of our best indigenous cathartics; the flowers are also tonic and emetic.

116, *Eupatorium purpureum* Joepye root, class and order the same, highly diuretic.

117, *Euphorbia maculata*. Blooming spurge, 11, 3; cathartic, emetic, and stimulant.

118, *Fagus ferruginea*. Beech 20, 13. It yields a pleasant edible nut. The decoction of the leaves, and in ointments, good for burns and scalds.

119, *Floerkia proserpine cardis*. Sweet salad; edible good and sweet.

120, *Fragaria virginiana*. Strawberry,

121, *Fragaria vesca*, common ditto,

} 12, 13, n. o. Rosacæ.
Pleasant fruit a decoc-
tion of the leaves use-
ful in dysentery.

122, *Fedia fago pynum*. Lamb lettuce. Max. A good salade, diuretic.

123. *Fraxinus Americana*. Ash tree, 21, 2, n. o. *Jasmineæ*. The bark is bitter and astringent, and used for hemorrhages, and the bite of snakes.

124, *Galium aperine*. } Goose Grass, 4, 1, n. o. *Rubiceæ*, diu-

125, *Galium asprellum*, } retic, and astringent.

126, *Gaultherius procumbens*. Winter green, chequer berry, 10, 1. A very pleasant aromatic stimulant. The oil and essence very much used in this country, diuretic.

127, *Geranium maculatum*. Crane's bill, 16, 10, n. o. *Geranaceæ*. This is one of our best and purest astringents.

128, *Geranium robertianum*. Same class and order. Used in the bloody water and bloody flux of animals, astringent and diuretic.

129, *Gerandia quircifolia*. Golden oak. Mx. Used by the Sioux Indians for the bite of the rattlesnake. It is also used for the toothache.

130, *Gentiana quinqueflora*, } Blue and fringed gentians, 16, 10,

131, *Gentiana crinita*, } n. o. *Gentiana*, tonic, bitter, corrobo-

132, *Gentiana Saponaria*. } rant, cathartic, good substitutes for foreign gentians.

133, *Geum robertianum*. Avens. Throat root, 12, 3, n. o. *Rosaceæ*; astringent and a pure tonic; used with gold thread for apathous ulcerations, in chronic diseases, diarrhoea, leucorrhœa, &c.

134, *Gnaphalium polyaphelata*. Life everlasting, 18, 2, n. o. *Corimbiferaæ*; astringent, vermifuge, and vulnerary.

135, *Goodyera pubescens*, scrofula weed. Used much in scrofulous affections.

136, *Hydrastis canadensis*. Scrofula weed. Much used by the botanists and other empirics. Bitter, pungent, nauseous and disagreeable.

137, *Hepatiaca triloba*. Liver root, 13, 13, *Ramunc*. Expectorant. It has been very extensively used in syrup in consumptive complaints.

138, *Helonias deplexa*. Helonias. The decoction of the bark of the root useful in cholic.

139, *Helianthus rigidus*. Sunflower, 18, 3, n. o. *Corymbiferaæ*.

140,, *Helianthus annuus*. Large sunflower, class and order the same. The seeds of this plant yield an oil equal to olive oil; astringent.

141, *Helanthus tuberosus*. Artichoke, class and order the same. Culinary roots, which contain sugar, diuretic.

142, *Helianthus canadensis*, properties somewhat similar.

143, *Helenium autumnale*. False Sunflower, yellow star. R. Tonic, febrifuge, errhine. It has been used in intermittents.

145, *Heracleum lanatum*. Martin root, 5, 2, n. o. *apiaceæ*; a warm stimulating carminative, like the anise and caraway.

145, *Hieracium canadensis*. Vining hawkweed, 18, 1, n. o. *cichor*. vulnerary, astringent, sudorific, and pectoral.

145, *Hieracium gronovir*, class and order the same; used for toothache and to cure warts.

147, *Hordeum jubatum*. A species of barley; used like the genuine.

148, *Humulus lupulus*. Common hop, 21, 5, Bitter, tonic, narcotic, lupulin, or the powder of the hop easily separated from it. They are the principal ingredients in beer and porter.

149, *Hydrophyllum virginicum*. Burn flower, 5, 2. This has been used against the bites of snakes, and that erysipelatous inflammation of the skin produced by the *Rhus* or poison sumach.

150, *Hypericum pyramidatum*, } St. John's wort.

151, *Hypericum canadense*, } St. John's wort, 5, 1; Balsamic, pectoral, somewhat styptic and vulnerary. Used in diarrhæa, dysentery, mania and low spirits; a syrup of it useful in croup.

152, *Impatiens pallida*. Jewel weed, 5, 1. The whole plant is acrid, and when taken internally it operates as an emetic, cathartic and diuretic.

153, *Iris versicolor*. Flower de luce, } 3, 1, cathartic, acrid, stimu-

154, *Iris virginianum*. Blue flag lily. } lant and emetic.

155, *Juglans cinerea*, Butter nut, } class 20, order 13.

156, *Juglans cinerea*, Blackwalnut, } The butternut is the

157, *Juglans squarrosa*, shag bark hickory nut } most valuable cathartic. The bark of the others is rubifacient.

158, *Juncus vulticus*. Rushes, L. diuretic, cathartic.

159, *Juniperus communis*. Common Juniper, } 21, 16, stimulant

160, *Juniperus virginianum*. Red cedar, } emenagogue, diuretic, and diaphoretic.

161, *Kalmia glauca*. Laurel, 10, 1, leaves poisonous and narcotic.

152, *Larix Americana*. Larix. Hackmetac, 20, 16. It produces a fine balsam similar to turpentine, useful in wounds, bruises, &c. This tree resembles the pinus, but the leaves are deciduous in the fall.

163, *Ledum latifolium*. Labrador tea, Marsh tea. Leaves bitter, astringent, and pectoral; used in cutaneous eruptions.

164, *Lemna minor*. Duck meat, 20, 2. A cataplasm of it has been used in gout, and in the piles. A decoction useful in Jaundice.

165, *Leonorus cardiaca*. Motherwort, 14, 1. Similar in its properties to valerian; used in hysterical and nervous affections.

166, *Leontodon taraxacum*. Dandelion. 18, 1. This plant has come into vogue greatly for jaundice, dyspepsia, &c. It is diuretic, slightly tonic and aperient.

167, *Lepidium virginianum*. Pepper grass, 15, 2. Eaten as a salad; acrid, diuretic, anti-scorbutic.

168, *Lilum canadenses*. } Canada and Philadelphia lily L.

169, *Lilum philadelphium*, } Roots useful in suppuration for poultices. Edible.

170, *Liatris cylindrica*. Gay feather, 10, 1, Diuretic; good in gravel.

171, *Liatris scariosa*. Button snake root, class, order and properties the same.

172, *Linum rigidum*. Wild flax.

173, *Linum usitatissimum*, common flax naturalized, 5, 5, laxative pectoral, sudorific, flax seed, one of our purest demulcents.

174, *Lobelia cardinalis*, cardinal lobelia, 5, 1.

175, *Lobelia syphilitica*, 5, 1.

176, *Lobelia inflata*. Devil's pepper, 5, 1. The last article is the divine remedy of the Thomsonian, Botanics, Steamers, and Eclectics,

which may all be ranked under the same class, and the one on which they raised themselves to their little ephemeral popularity, and one which with their short lived popularity descended almost to the shades of oblivion. It is a violent narcotic, acrid poison, and highly irritant. I have given a full account of it in the New York Journal of Medicine and Surgery, for the year 1846.

177. *Lonicera sempervirens*. Honeysuckle, 5, 1. The ripe berries of this beautiful plant are strongly purgative. The leaves and flowers are bitterish, mucilaginous and detersive. A syrup is prepared from them for sore throat and irritability of the lungs.

178, *Lupinus perennis*. Lupini, Finger leaf, L. Seeds bitter and flatulent.

179, *Lycopodium lucidulum*. Ground pine, L. Cryptogamia; used in dropsy, emenagogue, drastic, gout, diarrhoea, &c.

180, *Lycopus virginicus*. Water agrimony. Bugle 2, 1. This is one of our most valuable astringents; very valuable in uterine and all other hemorrhages. I have published a long account of it in the New York Journal of Medicine. I hope it will continue to engage the observation and attention of physicians.

181, *Lycopus minatus*. Water Hound, class and order the same. Used in intermittant fevers.

282. *Lythrum alatum*. Willow herb. L. Mucilaginous in diarrhoea and dysentery.

183, *Lysimachia quadrifolia*. Loose strife. L. Slightly astringent, stomachic, expectorant; good for coughs and cold, and to improve the appetite.

184, *Lythospermum officinale*. L. Similar in properties to cynoglossum.

185, *Malva rotundifolia*. Mallows, class 17; all the mallows are mucilaginous, and equivalent in properties to the slippery elm, gum arabic, &c.

186, *Marula cotula*. May weed. L. Bitter tonic, stomachic, nervine.

187, *Marubium vulgarie*. Hore hound, 14, 1; emenagogue, deobstruent, diuretic, used in dysmenorrhoea, and in affections of the kidneys. It is the basis of the negro remedy for the bite of the snakes.

188, *Medeola virginica*. Indian cucumber, 6, 3. It is highly diuretic and has been successfully used in dropsies.

189, *Menispermum canadense*. Moonseed, L. Bitter, tonic, mucilaginous; used in the strangury of horses.

190, *Mentha canadenses*. Common mint, 13, 1, n. o. Labiatae; all the mints are warm aromatic stimulants. The wild leaves applied warm on the breast will prevent the formation of abscesses, and promote the flow of milk.

191, *Meriganthus trifoliata*. Buck bean. 5, 1, n. o. Gentianae, Bitter, tonic, and cathartic. More intensely bitter than gentian; used in intermittent and other fevers, where tonics are required; in rheumatism, dropsy, and cutaneous eruptions.

192, *Mitella dyphylla*. Current leaf; Refrigerant, used in fevers as a drink.

193, *Mitchella repens*. Creeping chequer berry. This is a most valuable diuretic, much used in dropsy. For an extended account of it see my Medical Botany.

194, *Monarda fistulosa*. Balm, 2, 1, n. o. Labiateae.

195, *Monarda punctata*. Mountain balm, 2, 1, n. o. the same; altered to *Milissa*. Aromatic, fragrant, and anti-emetic, similar to the mints.

196, *Monotropa Uniflora*. Beech drop, pie plant, 10, 1, N. *Monotropae*. Anodyne. Dr. Steward's substitute for opium; cures ophthalmies.

197, *Milium effusum*. Wild Millet. L. Esculent.

198, *Myrica gala*. Bay berry. n. o. *Myricae*; astringent, anti-spasmodic used in dysentery. From the berries bay-berry tallow is made.

199, *Nasturtium palustre*, Nasturtion, L. aromatic, diuretic.

200, *Negundo acerandis*. Equivalent with all the maples.

201, *Nymphae odorata*. White pond lily, sweet pond lily, 13, 1. The roots are the parts employed in medicine. They are demulcent, anodyne and emollient. They form the best poultices which can be used in suppurating abscesses.

202, *Nuphar advena*. Yellow water lily, 13, 1. This plant possesses the properties of the above; but in a less degree.

203, *Nepeta cataria*. Catmint or catnep, 5, 1, n. o. Labiatae. carminative, stimulant, and much used in the affections of infants.

204, *Oxalis violaceae*. Clover leafed sorrel, L. 1, 5. This plant yields oxalic acid.

205, *Oenothera bennis*. Scabish Tree primrose, 8, 1, n. o. Malstron; esculent, mucilaginous.

206, *Orchis spectabilis*, Salep, L. From this Ocher's Salip is made, vermifuge.

207, *Ostrya virginica*. Similar to carpinus.

208, *Oryzopsis asperifolia*. American rice; eaten by the American Indians like cominon rice.

290, *Panax quinquefolia*. Ginseng, 5, 2. The divine remedy of the Chinese. Very abundant here, sufficient for commercial purposes. Stimulant cordial, tonic, expectorant, &c. An excellent ingredient with mallows in cough mixtures.

210, *Parnassia*. Similar in its properties to hepatica.

211, *Pastinaae Saliva*. Parsnip, 5, 2. Esculent. Seeds aromatic and stimulant.

212, *Pedicularis canadensis*. House wort, 14, 2,. Sometimes called heal-all. The Indians use it in the bite of snakes.

213, *Pinus banksiana*. See *Abies*, 29, 16.

214, *Pinus resinosa*. Pitch pine, 29, 16. From this turpentine and resin of commerce is made.

217, *Pinus mitis*. Pine 29, 26. All the kinds of pines are valuable, from which the pitch, resin, and turpentine are made. Diuretic and stimulant.

216, *Plantago major*. Common plantain, etc. Leaves cooling and vulnerary. Root, astringent. When young, leaves a good salad.

217, *Phytolacca decandra*. Poke root, 11, 10. Emetic, cathartic, narcotic. Used much in the cure of rheumatism; also in the swelled udder of cows.

218, *Physalis viscera*. Ground cherry, 5, 1. Berries diuretic and sedative.

219, *Podophyllum peltatum*. May apple. Mandrake, n. o. *Acitana*. This is one of our best native cathartics at the west, and it grows in great abundance there. On account of its superior efficacy as a cathartic, it is sometimes called mercury root. An account of it may be found in all our best medical dispensations. Leaves narcotic. Fruit relished by most people.

220, *Partulucca olevacea*. Purslain 11, 12. Diuretic and vermifuge. Esculant. A good salve made with it for the lips and nipples.

221, *Polygala paucifolia*. Dwarf milk-root, 17, 3, n. o. *Polygonacae*. Properties somewhat similar to *polygala senega*, stimulant, sudorific. Smells somewhat like the *Gultheria procumbens*. A tea of the plant useful in erysipelas. Used for rattlesnake bites.

222, *P. Sanguinia*. } Snakeroots. Class and order as above.

223, *P. Polygamia*. } Properties somewhat similar.

214, *Polygonum persicaria*. Water pepper, Smart weed, 7, 3, n. o. *Polygoniacae*. A pungent, biting, aromatic plant, diuretic and stimulating vesicant, and blistering the skin if applied long to it. Used a good deal in fomentation when an irritant effect is desirable.

215, *Polygonum hyderpipe*. Similar in properties to the above.

216, *Polygonum fagoprum*. Buck wheat. Esculent, flour in pancakes equal to wheat. A tea of the plant useful in erysipelas, both as a beverage and wash.

217, *Polygonatum pubescens*.

218, *Populus tremuloides*. Common poplar. Class 21. This is the celebrated tonic bitter of the Thompsonian or steamers. The buds are balsamic and stimulant.

219, *Populus balsamifera*. Balsam poplar. The balsam from the buds of this tree is considered to be equal to *copaeva*.

220, *Polygonus grandidentata*.

121, *Potentilla norwegica*. Cinquefoil, five finger, 12, 13. This a mild astringent, and was formerly used in diarrhoea. Properties somewhat similar to *tormentilla*.

122, *Prunella vulgaris*. Self heal. 14, 1. Bitter astringent Bruised and applied to wounds supposed to be very effectual in healing them.

123, *Prinos verticellatus*. Red berry alder. Bark astringent, emetic, and tonic. Berries purgative and vermifuge. A very ornamental shrub which would add much to the beauty of our door yards.

124, *Prunus Americana*. Wild cherry, black cherry, 12, 1, n. o. *Rosaceae*. This is a bitter astringent, and contains Prussic acid. Tonic, antibilious, and pectoral. It is the basis of Ayer's celebrated cherry pectoral.

125, *Pyrus coronaria*. Wild crab, 12, 1. Blossoms and fruit acrid bitter and austere, still the fruit is much used in preserves.

126, *Pyrola rotundifolia*. Round leaved winter green, 10, 1. Diuretic, leaves vulnerary.

127, *Pycnanthemum lanceolatum*. Wild basile, 14, 1. This plant is similar in its properties to the mints and pennroyal.

128, *Petelea trifoliata*. Wing seed, vermifuge tea, vulnerary in poultices.

129, <i>Quercus alba</i> . White oak,	} 20, 13. All the oaks are valuable astringents. From them tannin is prepared, the most valuable astringent in use.
130, <i>Quercus ruba</i> . Red oak,	
131, <i>Quercus pinus</i> ,	

Ranunculus repens, Crowfoot, butter cup, 14, 1. Acrid and narcotic. The leaves applied to the skin will blister it.

133, *Ribes cynosbati*. Gooseberry, 5, 1. Fruit edible, laxative, refrigerant. Their properties are universally known.

134, *Rhamnus alnifolius*. A species of buckthorn. Properties somewhat similar to *Rhamnus catharticus*, class 5, 1.

135, <i>Rhus typhina</i> . Sumach,	} 5, 3. Harmless astringent. Berries used in dysentery. Poisonous and order the same.— Produces an effect like <i>eysipelas</i> .
136, <i>Rhus glabra</i> . Smooth sumach	
137, <i>Rhus vernata</i> . Poison sumach.	
138, <i>Rhus toxicodendron</i> Poison sumach.	

naceae. The roots of this singular plant are bitter, tonic, and stomachic, and are useful in dyspepsia, and where tonics are required. Useful in diarrhoea and chronic dysentery.

150, *Saponaria vaccatia*. Seapwort, 10, 2. Tonic, diaphoretic, and hepatic. It has been used in rheumatism, gout and jaundice. They are diuretic and emmenagogue.

151, *Saxifraga aiton*, *Saxifraga*.

152, *Saxifraga Pennsylvanica*. Rock saxifraga, 10, 1. They are bitter and astringent. Root useful in gravel.

153, *Seipus pungens*. Bull rush. *Cryptogamia*. Diuretic.

154, *Scutellara lateriflora*. Scull cap, mad dog weed, 14, 2, n. o. Labiateae. Volumes have been written and more angry passions has been excited upon the anti-hydrophobic virtues of this plant, and much ridicule has been cast upon the believers in it. Still the facts and arguments which have been adduced in its favor have been overthrown. Some of the most respectable physicians in England, and in the United States have been believers in it, such as Dr. Mussey, of Cincinnati, Dr. Spalding, Drs. Wells, Stone, Williams, Rafanisque, and many others in America, besides Youatt and Watson, in Europe. I am no believer in any specific, yet I think the subject should be treated with candor, rather than ridicule. Surely a substance containing the following ingredients cannot be considered inert. The substances found in it by Cadet were 1st, Yellow green oil, fixed and soluble in ether. 2d. A bitter principle. 3d. Chlorophylle. 4th. A peculiar volatile matter, tasting and smelling like the principle of anti-scorbutic plants. 5th. An essential oil. 6th. Albumen. 7th. A sweet mucous substance. 8th. A peculiar astringent principle. 9th, Lignin. When burnt the ashes afford chloride of soda and seven other salts. It is, says he, tonic, astringent, anti-spasmodic, at least. The steamers and botanics consider it their grand anti-spasmodic. (See my communication in the transactions of the American Medical Association, vol. 2, 1849.)

156, *Santillaria galimculata*. Hooded willow herb, class and order the same. Anti-spasmodic.

156, *Silphum lanchium*. Turpentine gum flower, L. Yields a fine fragrant gum like Frankinsence, and chewed by the Indians to sweeten the breath.

157, *Silene stellata*. Wild pink, L. Vermifuge.

158, *Sinapis alba*. White mustard, 16, 2. Antiscorbutic and diuretic; leaves used as a salad.

159, *Sinapis nigra*. Black mustard, 15, 2; heating and stimulant. Used as a condiment. Seeds in large quantities unbroken emetic; bruised most excellent for an external irritant.

160, *Sisymbrium canescens*. Hedge mustard, n. o. cruciferae, diuretic and expectorant.

161, *Smilax rotundifolia*. Green briar, 21, 6. An infusion is said to be of service in mercurial salivation, in chronic rheumatism, and in diseases of the skin.

162, *Spergula arvensis*. Spurge, 10, 5. The inhabitants of Norway

and Finland use the seeds for bread, when the corn fails; poultry are fond of them.

163, *Solidago laterifolia*. Golden rod, 18, 2.

164, *Solidago odora*. Sweet acented golden rod. 18, 2. Carminitive. Its properties are very similar to aniseed, caraway seed, &c., aromatic and stimulant.

165, *Sorghum natans*, L. Esculent.

166, *Spiraea opulifolia*. A species of hord hack, 12, 5, slightly astringent and tonic.

167, *Symphonia carpus occidentalis*. Snow berry; root used for ague, tonic, and astringent; fibrifuge in small doses.

168, *Symplocarpus foetidus*. Skunk cabbage, n. o. Irvidian Root acid and stimulant; when green applied to the tongue it will instantly blister it; very extensively used in medicine, an account of which may be found in all our dispensatories.

169, *Thalictrum anemanoïdes*. Meadow rue, 13, 13; a poultice made of the leaves of this plant has been known to alleviate the pain of sciatica.

170, *Thalictrum dioecum*. Same class and order; sometimes used for snake bites.

171, *Tiphrosia*. Turkey pea, L. Vermifuge.

172, *Teucrium canadense*. Wood sage, germander, 14, 1. Tonic, aromatic, bitter.

172, *Tilia americana*, Bass or Linn, 13, 1. This is a most valuable wood. The bark formed into poultices is superior to slippery elm, and used for the same purposes. Most extensively used in burns, bruises and ulcers.

173, *Trillium cernium*. Nodding trillium, 6, 3. The roots of all the trilliums are most valuable astringents. I have published a long article upon them in the New England Journal of Medicine and Surgery, and in the New York Journal of Medicine, and in the Transactions of the American Medical Association.

174, *Triosteum perfoliatum*. Fever root, 5, 1. Cathartic, and in large doses emetic, diuretic, useful in fever, agues, and pleurisies.

175, *Ulmus Americana*. Common elm, 5, 1. A splendid ornamental tree. Diuretic and demulcent.

176, *Ulmus fulva*. Slippery elm, 5, 2. The bark is one of the purest demulcents known for drinks and poultices.

177, *Urtica pumila*. Common nettle, 20, 4, stimulant, diuretic.

278, *Valeriana ciliata*. American valerian L. Used in nervous diseases.

119, *Vaccinium macrocarpus*. The whortleberry species, L., 10, 1. diuretic.

180, *Verbascum thapsus*. Mullein, L. Much used as an external mild irritant, by binding the leaves on the part effected, demulcent, and pectoral.

181, *Verbena hastata*. Purple vervain, 14, 1, bitter, emetic, expectorant. A syrup prepared from it very useful in coughs.

But, since the case is a desperate one,
To explore his chest it may be well ;
For, if he should die, and it were not done,
You know the *autopsy* would not tell.

Then out his Stethoscope he took,
And on it he placed his curious ear ;
Mon Dieu ! said he, with a knowing look,
Why here is a sound that is mighty queer !

The *bourdonnement* is very clear—
Amphoric buzzing, as I'm alive !
Five doctors took their turn to hear ;
Amphoric buzzing, said all the five.

There's *emphysema* beyond a doubt ;
We'll plunge a *trocar* in his side—
The diagnosis was made out,
They tapped the patient ; so he died.

Now, such as hate new-fashioned toys,
Began to look extremely glum ;
They said that *rattles* were made for boys,
And vowed that his *buzzing* was all a hum.

There was an old lady had long been sick,
And what was the matter none did know ;
Her pulse was slow, though her tongue was quick ;
To her this knowing youth must go :

So there the nice old lady sat,
With phials and boxes all in a row ;
She asked the young doctor what he was at,
To thump her and tumble her ruffles so.

Now, when the Stethoscope came out,
The flies began to buzz and whiz ;
Oho ! the matter is clear, no doubt ;
An *aneurism* there plainly is.

The *bruit de rape* *bruit de scie*,
And the *bruit de diable* are all combined ;
How happy Bouillaud would be,
If he a case like this could find !

Now, when the neighboring doctors found
A case so rare had been descried,
They every day her ribs did pound
In squads of twenty :—so she died.

Then six young damsels, slight and frail,
Received this kind young doctor's cares ;
They all were getting slim and pale,
And short of breath when mounting stairs.

They all made rhymes with "sighs" and "skies,"
And loathed their puddings and buttered rolls,
And dieted, much to their friends surprise,
On pickles and pencils and chalk and coals.

So fast their little hearts did bound,
The frightened insects buzzed the more ;
So over all their chests be found
The rale *sifflant*, and rale *sonore*.

He shook his head ;—there's grave disease—
I greatly fear you all must die ;
A slight *post mortem*, if you please,
Surviving friends would gratify.

The six young damsels wept aloud,
Which so prevailed on six young men,
That each his honest love avowed.
Whereat they all got well again.

This poor young man was all aghast ;
 The price of Stethoscopes came down ;
 And so he was reduced at last
 To practice in a country town.

The doctors being very sore,
 A Stethoscope they did devise,
 That had a rammer to clear the bore,
 With a knob at the end to kill the flies.

Now use your ears, all you that can,
 But don't forget to mind your eyes,
 Or you may be cheated, like this young man,
 By a couple of silly, abnormal flies.

EDITORIAL.

Report of the Committee of the American Medical Association on Medical Education, made at the last Annual Meeting in St. Louis, and contained in the Transaction for 1854. By PRO. J. L. CABELL, M. D., of the University of Va.

We have read this very able report with much care, with deep interest, and so far as its main features are concerned, with unqualified approval. From year to year, the National Association, first established for the almost sole purpose of promoting reform in medical education, and thus elevating the character and usefulness of the profession, has had presented before it able reports advocating those reforms, and has passed resolutions insisting upon the importance of a respectable standard of preliminary qualifications for those entering upon the study of medicine,—of a prolonged and more thorough course of instruction in medical colleges,—of raising the standard of acquirements for the degree of M. D., and of having others join in the recommendation for such titles than those who have a pecuniary interest in conferring them. Still with a few exceptions, physicians have gone on in the old way receiving into their offices without much discrimination those who apply for admission, and the schools have continued with their ridiculous “ sixteen weeks ” terms, rushing in that short time over the whole field of medical science, carrying all the branches on simultaneously in six or seven lectures per day, and admitting not only to the lectures, but to the graduating class, all

who could pay the matriculation and ticket fees, without the slightest preliminary examination, and graduating in some instances at least, with but the form of an examination, those who could pay for a diploma.

In this primary object of the Association's organization, although the profession generally seem to entertain correct sentiments and to express correct views, it has failed as yet to produce, excepting in a few instances, any practical and palpable results. We are ready to acknowledge that something, indeed, much is gained when the body of the profession see clearly the defects which exist; but this is useful only as leading to wise and proper action—and is of the same character as making a correct diagnosis of a disease, preparatory to its proper treatment. If the treatment is not to follow, the patient is not benefitted by our knowledge of the case. Now, why has the Association failed in effecting the great object of its organization? Why has seven years passed by with as many great meetings and as many annual reports made, and series of resolutions passed on this subject, with so little real change—with such an absence of positive reform? Where is the difficulty? Who is in the fault?

The difficulty certainly is not in the nature of the case, for there is no necessary impediment in the way of demanding higher intellectual and educational qualifications from those who enter upon the study of medicine, or in extending the lecture term and making it more thorough; or in requiring higher attainments for admission to the doctorate. There is, it is true, something to be attributed to the *fast* character and propensities of our people, but this is by no means insuperable; these demands can be made and insisted upon; can be effected by the united action of the profession.

Our system of medical education is universally considered to be less perfect than it should be. There is then *fault* somewhere. And where does it exist?

Some affirm that the fault is with the profession generally—with its private members. That they receive all sorts of material into their offices and encourage the attendance of their pupils upon such schools as have a short course, and as will afford them the greatest facilities for a diploma. Others say the fault is with the schools—that they have full power to make their own regulations—that they can make their own terms as to the admission of students;—the length of time instruction shall continue, and the amount of knowledge they shall possess before receiving medical honors. That as long as such opportunities are afforded for the easy and

rapid attainment of a degree, students without appreciating their best interests, will go to such schools; and that the schools being placed as the guardians of the public and the profession, are bound to pursue such a course, as shall secure the honor of the one, and the safety of the other.

Now, as both these allegations are undoubtedly true, a mere statement of the case shows, as clearly as argument or illustration can render it, that fault rests upon both the schools and the profession at large, and neither can make the other a scape-goat for carrying off its own sins. Private members of the profession are at fault, in so far as they receive into their offices, as students of medicine, those who from defects in either moral or intellectual character, or in educational advantages, are incompetent to do honor to the profession, or serve with usefulness the community; and also in so far as they extend patronage to those schools which, regardless of the honor of the profession and the interest of the community, pursue a course for their own gain which is detrimental to both.

But this by no means removes responsibility from those who assume to qualify young men for the practice of medicine, and to judge of their qualifications of doing justice to their calling. Here the chief responsibility must ever rest, until it is removed by their united action.

Two or three schools may contribute to this end of elevating medical education, but no few can alone accomplish all that is desired. Would not a convention, composed of representatives from the different schools, be able to come to some understanding, and extend the length of time and the thoroughness of their instructions?

But we must hasten on to the report of the committee, and furnish sufficient extracts thereto to give an impression of its chief positions and its scope. We hope this will receive a careful perusal:

"The fact being universally admitted that the ranks of the medical profession are rapidly filling with young men very inadequately qualified, either as respects native endowments or positive attainments, for assuming the fearful responsibilities of their vocation — the practical questions which, as your Committee conceive, demand their especial consideration, have reference to the particular features of the existing system of medical education in America which are most instrumental in producing such a result, and to the most judicious, safe, and practicable means for remedying the evil. In the consideration of this question, the Committee believe that they could not present the subject to the Association in a more suitable form than by a recapitulation of the several particulars in respect to which the system of collegiate medical education in the United States has been the subject of unfavorable criticism, and by an inquiry in regard to the extent to which the measures hitherto taken by

the Association have had the result of removing or lessening the defects against which they were directed.

"1. Among these defects, the want of a proper preliminary education on the part of a large, we fear a constantly increasing, proportion of medical students, has received the earnest attention of the Committee. To this deplorable evil, the existence of which is so easily recognized by the unprofessional community, we may justly ascribe the diminished confidence accorded to regular physicians, and the 'forfeiture of social position' that has attended the loss of the homage which the profession formerly received. To the same cause may be attributed, in some degree at least, the gradual lowering of the standard of professional attainments required of the candidates for graduation; since it cannot be otherwise than that such standard should bear some relation to the average talent and mental culture of the pupils. This subject was considered so important by the members of the National Medical Convention which met in New York, in 1846, as to induce that body to appoint a special committee "to report on the standard of acquirements which should be exacted of young men, before being received as students of medicine." That committee addressed inquiries to thirty-six medical schools, as well as to several distinguished medical practitioners in different parts of the Union. From the answers received, it appeared that there was then no uniform standard of preparatory education exacted of medical students, but that the profession seemed to be alive to the want of such a standard, and desired one to be established by the Convention. The inquiries of the committee further elicited the expression of a very considerable diversity of opinion as to the kind and extent of preparation which ought to be exacted, standard of different writers varying from 'a common school education, up to the highest collegiate attainments. The committee, in view of the want of any means of legal compulsion, thought there could be no hope of attaining any useful result by insisting upon a standard above the circumstances of the country and the times, and recommended the establishment of 'a uniform standard of preliminary education for medical students, which should be of a moderate character — in the first instance too low, rather than too high — and yet of such an extent as will insure both the knowledge and the mental discipline necessary to those who would enter a profession full of labor and responsibility, without excluding meritorious young men of limited means and opportunities.' They then proceeded to specify the following standard as one which might reasonably be exacted of every young man who should apply to be received as a student of medicine: 'A good English education; a knowledge of natural philosophy, and the elementary mathematical sciences, including geometry and algebra, and such an acquaintance, at least, with the Latin and Greek languages, as will enable the students to appreciate the technical language of medicine, and read and write prescriptions.' It must, we think, be conceded that the standard thus recommended by the committee and adopted by the Philadelphia Convention, in May, 1847, with an evident desire to effect a gradual reform by gentle and safe methods rather than to make bold and

radical changes, was in all respects moderate and reasonable. Your Committee have not the data necessary for the formation and expression of a positive opinion as to the extent to which this or any other standard has been exacted of young men wishing to enter upon the study of medicine, either under private preceptors or in collegiate classes. So far, however, as their information extends, they have reason to fear that there has been but little if any real reform, in regard to this matter during the seven years which have elapsed since the action of the Philadelphia Convention. There are, however, gratifying indications of future improvement. Thus, the report of Dr. PITCHER, at the last Annual Meeting of this Association, makes known the fact that 'it is in contemplation,' by the authorities of the University of Michigan, 'to exact the same preparation for admission to the Medical Department as is now prescribed for membership in the Department of Arts.'

* * * * *

"Is there no remedy for an evil which has done so much to dishonor a profession once noted for the profound and varied learning of its members? Your committee are of opinion that it would be premature to come to so discouraging a conclusion. They do not yet abandon the position which was ably sustained by the late Dr. Parrish, in a report made to the Philadelphia Convention, that 'the influence of combined and harmonious action, directed to a special object, by the great body of the profession, is a power more potent than that exercised by legislatures, or by the corporations they may create.' The operation of such an influence is, however, slow, and we should not be impatient if ample results are not rapidly attained. One of the instrumentalities through which it operates is gradually being brought to bear upon the solution of the difficulties which thwart the attempts that have hitherto been made to introduce this and other measures of medical reform. We allude to the organization of State and County Medical Societies, the manifold usages of which agencies are to obvious to require exposition.

"2. A second alleged defect of the 'American System' is the shortness of the term of lectures. A resolution adopted by the Convention held in Philadelphia, in 1847, recommending an extension of the term, in all the medical schools, from four to six months, has been repeatedly sanctioned by the Association. A few of the schools promptly complied with this recommendation, but a part of them, as we are informed, have since found it expedient to abandon the experiment, and to resume their former practice. This fact illustrates the difficulty attending every attempt to carry out any very decided measure of reform, on the part of a few of the schools, while the majority refuse to co-operate."

The report then proceeds to discuss the question of lengthened terms of lectures, refuting, with decided success, the arguments in favor of short terms, presented at the second annual meeting of the Association by the medical faculty of Harvard University. It shows that the elementary branches, such as anatomy, chemistry, &c., must be taught in the

schools, and cannot be left to private instructors, especially in the country as the facilities for this kind of instruction do not there exist; and that the student in a private office has his reading mostly confined to "subjects of practical medicine and surgery, in which he forms most vague and erroneous notions with regard to the structure and laws of action of the organs, the diseases of which he is studying; and such notions do not always easily give place to the simple truth, when this is subsequently presented.

The report speaks encouragingly of private schools where facilities for conducting them exist, as in cities; such private schools being auxilliary to the larger public institutions, and where instruction should be given to limited numbers, and such work only should be committed to them as cannot be adequately performed by the incorporated schools with larger classes,—

"Such as demonstrations on the part of the student, instead of the instructor, but still under his superintendence and direction; the actual performance of surgical operations on the dead body; chemical manipulations; the use of the microscope; and clinical instruction, truly so called, which is the study of diseases at the bedside, cases being watched from commencement to end, with special attention to the use of the physical means of diagnosis in diseases of the lungs and heart. Such instruction as this is of inestimable importance. It cannot be given by lectures alone. The student must practice for himself, under the supervision and direction of a competent teacher; and only a class of limited number can receive adequate attention from one instructor. Such instruction should, therefore, be the appropriate work of a corps of teachers auxiliary to the public schools. From its very nature it can be profitable only to advanced students. In the opinion of your Committee, it should follow rather than precede or accompany, the instruction imparted in the public schools. The latter should consist mainly in a didactic exposition of the elementary principles of the medical sciences. In this view of the subject, the Committee are inclined to believe that very great advantage would result from an extension of the course of lectures to even a longer term than that heretofore recommended by the Association. In addition to the very obvious evil of crowding six or seven lectures into the compass of a single day, another striking objection to the present system lies in the fact that the practical branches of medical science are of necessity unfolded to the student before he has had an opportunity of becoming acquainted with the elementary principles upon which they are mainly based. For example, his attention is directed to, and his mind bewildered with, an intricate account of the causes and varieties of convulsive diseases, before he has obtained any useful degree of knowledge of the anatomy and physiology of the nervous system, upon which the

prevalent doctrines as to the pathology and rational therapeutical indications of such diseases entirely rest. If the term of lectures were extended, it would be possible to diminish the number of lectures for each day, and to make such a distribution of the several branches as would insure an opportunity for the thorough study of the anatomy and physiology of every organ, before the attention of the student should be directed to its pathological states, while several hours would be appropriated to private reading and reflection, and to the practical study of anatomy by means of dissections by daylight.

"Regarding, then, 'the American System' of medical education by 'private preceptorship mainly,' at least as that system is carried out in the rural districts, and consequently, for a large majority of American students, 'as radically wrong,' your Committee would advocate the substitution of a plan which would bring the whole circle of *elementary* medical education within the province of the schools."

The report then proceeds to notice some of the positions taken by the Med. Fac. of Harvard against lectures, to the effect that "they cannot give complete instruction in any part of professional study" "their great purpose being to teach the student to learn for himself," and that "although the student may listen to lectures with interest, he does it without effort; his mind is not actually employed;" and says:

"With the exception of the last paragraph which, as asserting that it should be the object of a lecturer to present his subject in so attractive a form as to dispense with the necessity of active effort on the part of the student, conveys a most mischievous error, the force of the foregoing remarks cannot be denied. But it should be observed that they may apply as well to private teaching as to instruction by public lectures; and that in either case, they apply to the abuse alone and not to the right use of the system. It especially deserves notice that the abuse in question is almost necessarily incidental, not to the lecturing system, but to the short-term system, and might be more easily avoided if the proposed extension of the term were generally adopted. The weight of education must fall, unquestionably, upon the pupil; and any system, whether that of public lectures or private preceptorship, which aims to dispense with constant and hard labor on the part of the pupil, is mischievous in proportion to its success. The question is not whether teaching by lectures be better than active, personal study, since these are by no means incompatible, but whether personal study will be most advantageously aided and directed by a judicious course of instruction by lectures, or by 'private preceptorship mainly, with the school as its complement.' The Medical Faculty of Harvard University, though intending to address themselves to the latter question, have, in reality, only discussed the former, all the while assuming the existence of an antagonism between the system of teaching by lectures, if the course be too prolonged, and the habit of active personal study. Your Committee do not admit that such antagon-

ism exists. On the contrary, they are firmly convinced that 'the active, practical discipline of the mind' is one of the most certain results of the right use of the system of teaching by lectures. Indeed, we have always thought that it was the failure of the old system of exclusive text-book study and recitation to secure this practical discipline of the mind, that led to the adoption, in all the higher institutions of learning in Europe and America, of the practice of public lecturing. Under this system the intelligent student, following in the train of thought pursued by the lecturer in his discussion of doubtful questions, in his analysis of complex phenomena, and in his inductions of general truths from particular facts, learns to perform, for himself, the works so difficult to those who have only studied by a mechanical routine of unreflecting labor, of critical analysis, and inductive generalization.

"In order, however, to insure the full success of this system by a right use of it, and by preventing that abuse which is truly obnoxious to the criticism of the Medical Faculty of Harvard University, and which, unhappily, is too prevalent, it is indispensable that searching examinations should be given, each day, on the lectures of the preceding day. It is this combination of the two systems which is productive of the most wholesome results. Those who have had experience in this matter know how wonderfully the faculties of the mind are stimulated in listening to a discourse on the topics, arrangements, and illustrations in regard to which we expect to undergo a public examination. It is objected that 'such examinations amount to very little' when the class is large and each student is examined at long intervals only. As a test of the industry of an unwilling student who is to be stimulated *only* by the fear of disgrace, these examinations would, it is admitted, amount to very little. But it is a great mistake to assert that, as a means of instructing students of average capacity and ambition, their usefulness is much impaired by the large size of a class. A particular question, although addressed to an individual, is nevertheless heard by all, and they may mentally answer it, comparing their respective answers with that of the reciting pupil, or with the explanations made by the teacher. Thus, all may derive equal benefit with the person who alone was questioned. Nor will there be wanting a sufficiently potent stimulus, in the case of the candidates for graduation, in those, at least, who know that although they may not have to take part in the recitation of the day, they may be called upon to answer the same questions at their final examination. If the teacher propounds his questions, as certainly he should, in such a form as to throw upon the student the burden of analyzing a complex subject submitted to him for elucidation, it is impossible to exaggerate the benefit which the latter may derive, both in giving precision and completeness to his knowledge of the particular subject, and in the mental discipline which is incidental to the process employed in its acquisition. It must be evident that such examinations will be more useful if conducted by the lecturer himself, than if left to the performance of a third party, especially if the latter did not himself hear and enter into the spirit of the lectures. Your Committee perceive much to condemn and little to approve in a system

which throws the whole responsibility of the application of this important instrumentality of instruction, upon a class of 'Grinders,' the extent of whose popularity is measured by the success with which they prepare a pupil to pass his examination with the minimum expenditure of time and labor, and consequently with the smallest amount of actual attainments.

"The feasibility and the value of the system which is here recommended, have been tested in the Medical Department of the University of Virginia by an experience of a quarter of a century. In this institution the term of medical lectures is of the same length as the academic session, namely, *nine months*; and never are more than three lectures delivered on any one day. Each lecturer, however, occupies an hour and a half for lecture and recitation, the latter exercise consuming about one third, between a third and a half, of the whole time. The class of medical students is about one hundred and twenty-five in number. Of these not more than twelve or fifteen, often not so many, recite at the same time; and yet there is not the slightest ground for believing that the average dividend of benefit to each student is less now than it was ten years ago, when the number did not exceed forty or fifty. We learn that this system is in successful operation in the Medical School of Winchester, Virginia, and in the Medical Department of the University of Michigan. An exposition of some of the peculiar features of the last-named institution, as contained in the report of Dr. Pitcher, read at the last Annual Meeting of the Association, appears to have met with the unqualified approbation of the members then present. Let it be observed that most of those peculiar advantages are incidental to the long-term system, and to that alone."

The committee, notwithstanding the recommendation of the Association to extend the lecture term from four to six months, has not been complied with, suggests the expediency of some action on the part of the Association, by which encouragement will be held out to such schools as may be willing to make trial of a reformatory plan, the general features of which are as follows:

"1. The extension of the term to eight months, with not more than four lectures per diem at any period of the course, and not more than three during the dissecting season. 2. The exclusive assignment to such schools of the whole ground-work of elementary medical education, and the subsequent transference of the advanced pupils to schools, whether private or public, in which they should be taught to make practical application of the principles which they had previously acquired.

"The increase of expense necessarily dependent upon the acquisition of a medical education under such a system, constitutes a real difficulty; but, after much reflection, the Committee are of opinion that no adequate reform can be obtained without some additional pecuniary sacrifice as well as mental labor on the part of the student. If the Association possessed the means of compelling the schools to adopt this system, the

Committee would regard it as inexpedient to exercise such prerogative. It has been seen that very different views are entertained by the faculties of some of the most respectable institutions of our country. Their frank avowal and earnest defense of those opinions cannot fail to command our respect, how widely soever we may dissent from their conclusions. But let others who may be disposed to make trial of the proposed reform, be encouraged to do so; and then let the tree be judged by its fruits.

"3. The omission, in the curriculum established by many of our medical colleges, of one or two important branches of knowledge, is an evil which, in the present state of the medical sciences, and in view of the relations of the medical profession to society, imperatively calls for redress. Your Committee are fully aware of the arguments which may be advanced against large additions to a curriculum already disproportionate to the short term allotted to the course. They would not, therefore, for the present, recommend any considerable additions. They would, however, insist upon the urgent necessity of embracing in the regular curriculum the study of physiology, and of medical jurisprudence, both of which are omitted in many of the schools. In a large proportion of these institutions, physiology is assigned to the professor of special anatomy. whose other duties preclude him from the possibility of doing more than merely stating the office of each organ, without inquiring into the conditions of its action, and consequently without elucidating the general laws of vitality. The gradations of organization throughout the animal series, furnishing, as they do, the data upon which most of the inductions of human physiology are based, and therefore felicitously characterized, by the great Cuvier, as so many experiments made for us by nature herself, should be understood by every student of medicine. The study of the outlines of comparative anatomy, as a part of a complete course of instruction in physiology, has an importance which can scarcely be overrated. It may be urged that while this position holds good with reference to those who are to undergo a process of training for the prosecution of original researches, it will suffice for the great body of students, whose object it is to prepare themselves to practice the healing art with credit and success, to adopt, upon the authority of others the general principles of physiological science. But this is just the kind of instruction which we hold to be not only valueless but detrimental.

"It is the unanimous testimony of all competent teachers, that they experience much difficulty in placing their students in a position to appreciate an abstract principle or general truth, in any other way than by leading them successively along the several paths which converge to that central point. A pupil may commit, *memoriter*, the words in which a general truth is enunciated; but he not only finds it difficult to retain them in his memory, but he derives little benefit even if that difficulty be overcome. The acquisition does not truly become a part of his mental furniture, and is not appreciated as the living truth. But let him be made to apprehend the reality and the significance of the particular facts upon which the induction is based, and to form the conclusion by the spontaneous exercise of his power of generalization, and the truth will

strike upon his mind with all the vividness of a personal experience, while the intellect will be invigorated and rendered more acute."

On the subject of Clinical Instruction we are happy to find the report according so nearly with the views we have in this Journal already expressed. Still we think the committee regard too lightly the subject of private clinical instruction in the sick room in ordinary practice, though they may not overrate the advantages of hospital clinical instruction. Our opinion is that private clinical instruction is most important, and for it there is no substitute; while a thorough course of private clinical training is more than a substitute for hospital advantages, though the latter, under certain circumstances, are of very great utility. The report proceeds:

"4. The profession objects, with much reason, to the entire neglect or very imperfect use of clinical instruction in many of the medical colleges of the United States. As respects some of these institutions, the defect is irremediable, owing to their location in villages too small to furnish subjects for hospital practice. And in some of our larger cities, the seats of the oldest medical colleges in the Union, the hospitals are either entirely inaccessible to the student, or are opened to him under such restrictions as to make it a privilege of little value. In such cases, the schools have been driven to the necessity of finding a substitute in what are termed 'college clinics.' But even where no other impediment hinders the students from visiting the hospitals daily, those who attend six lectures each day in the college, and are also engaged in the study of practical anatomy in the dissecting room, can find little time or disposition for such clinical observations as will be of any value to them. Hence, it is only the small minority who remain in the city during the summer and autumn that truly derive any profit from the facilities for clinical observation which the city hospitals may afford.

"We have almost invariably found that, among even this class of students, only those who have previously graduated can be induced to read, in connection with their clinical observations, the class of books which constitute the elucidators of disease. The undergraduates feel themselves constrained, by the prospect of a coming examination, to confine their reading mainly to the elementary text-books. In view of such facts, your Committee express their hearty concurrence in the position taken by Dr. Pitcher, in his report, and indorsed by the vote of the Association,—'That a familiar knowledge of the elements of medical science should precede clinical instruction.' This course is practically adopted by a large number of the better class of medical students, who pursue clinical studies for a period of from one to three years *after graduation*, either in the hospitals of our own cities, or partly here and partly in Europe. Having dissolved their connection with the schools, in which elementary instruction alone can be adequately given, and in which the second-course students pursue precisely the same studies as those who are attending lectures for the first time, they properly lay aside elementary books, and

substitute, in addition to systematic 'Clinical Guides,' the published records of the clinical observations of those careful and reliable observers who have done so much towards giving precision and certainty to modern pathological doctrines, by authenticating the data upon which they are based, and clearing away the immense rubbish of 'false facts' which, as much as aught else, had retarded the progress of medicine as a positive science. By the aid of such accurate clinical reports, carefully studied in connection with the actual observation of cases at the bedside, the intelligent and earnest pupil may add to his own personal experience that of all the eminent clinical reporters whose works he may read. The descriptions there given of the daily progress of the symptoms, and the effects of remedies, can scarcely be appreciated without the aid derived from an examination of cases of the actual disease; but with this aid, that familiar law of our mental organization in accordance with which vividness is imparted to our conceptions by being associated with sensible objects, is brought into operation, and the reported cases rise before the mental vision with the clearness and distinctness of reality.

"In immediate connection with this topic, the Committee would again invite the attention of the Association to the importance of other branches of medical science which may be studied practically. We may specify practical chemistry, the use of the microscope as an instrument of research, and as furnishing data upon which a differential diagnosis may be based, practical midwifery, and operative surgery. It is a fact which may well elicit our mutual congratulation, that efficient instrumentalities for thorough practical instruction in all these branches, are being brought into operation in various parts of the Union. The advertisement of 'the New York Preparatory School of Medicine' is now before us. Such associations, if they fulfil their promise, will deserve the encouragement of the profession. We think, however, that the use of the term "preparatory" may mislead the public, to the detriment, perhaps, of these auxiliary schools. All instruction received by a pupil is preparatory to the great business of life; but in no sense can such instruction as these schools propose to give, be considered preparatory for that of the incorporated schools. The latter is elementary, and should precede the practical. We shall presently consider, under another head, the objection that may be raised on the score of the difficulty of inducing many students to apply for such instruction, after having received the diploma which entitles them to practice medicine and surgery."

The report, after speaking in very just terms of what it calls the "disgracefully low standard of professional knowledge and general mental culture exacted of the candidates for the degree of Doctor of Medicine," and the importance of having others than those pecuniarily interested in the conferring of degrees, participate in the examinations and recommendations; and after treating at some length upon the mode in which medical investigations should be conducted, concludes with the following resolutions as a summary of the principal views embodied in the document:

"1. *Resolved*, That the views and recommendations heretofore expressed by this Association, respecting the importance of establishing a uniform standard of preliminary education, of extending the term of lectures, and especially of greatly elevating the standard of professional attainments requisite to graduation, be hereby reëffirmed.

"2. *Resolved*, That this Association approves and recommends the practice of daily examinations by each professor, as essential for securing 'that active, practical discipline' of the mind which is one of the most important ends of collegiate instruction; and believes, not only that such a system might be easily put into operation, under an extension of the term of lectures, but that the whole ground-work of elementary medical instruction might be most advantageously assigned to the schools which may adopt that system, as a substitute for the very faulty one of private office instruction now in common use.

"3. *Resolved*, That this Association cordially approves of the establishment of 'private schools' duly organized for giving that species of instruction which consists 'in demonstrations' and other practical exercises "on the part of the student, instead of the instructor, but still under his direction and superintendence," embracing the whole circle of clinical observation and practice, the use of the microscope, chemical manipulations, and the performance of surgical operations on the dead body; and would earnestly recommend such institutions to the patronage of those graduates who did not enjoy similar advantages during the period of their collegiate pupilage.

"4. *Resolved*, That those medical colleges whose curriculum does not now include full courses of lectures on physiology and medical jurisprudence, be earnestly invited to make immediate provision for supplying the deficiency, and to require the professor of physiology to make an exposition of the outlines of comparative anatomy, to such extent, at least, as may be necessary to enable the student to appreciate the force of the evidence upon which the modern doctrines of physiology mainly rest."

"5. *Resolved*, That to insure the efficient and beneficial operation of the proposed measures of reform, the Association considers it essential that some uniform system of examining candidates for admission into the ranks of the medical profession, *in addition to the collegiate examinations for degrees*, should be adopted in all the States of the Union.

"6. *Resolved*, That the Association regards as auspicious omens of future progress, the already improved character of our medical literature, and the evidences of an increasing desire, on the part of a respectable number of medical students, for a higher grade a professional education, as exhibited in the patronage extended to extra-collegiate organizations for practical teaching; and that, in view of such encouraging signs, it cherishes an abiding conviction that more thorough and general reforms will be ultimately, though gradually, accomplished.*

J. L. CABELL, M.D., *Chairman*.

E. S. LEMOINE, *Secretary*.

* Dr. Cabell not being in attendance, his report was not read before the Association, therefore, no action was had upon these resolutions.

We repeat that, on the whole, we are much pleased with this report, and hope its views will be deeply considered by the profession; and that gradually, if we are not allowed to expect speedily, its main suggestions may be followed. We are proud that the Medical Department of the University of Michigan is so far in advance of almost every other school in the country, in the cause of reform herein so ably pointed out.

A. B. P.

Public Sentiment and Legal Opinions on the Homœopathic Act.

Several of the "Secular" papers of the State have expressed opinions on the subject of the mingling of Homœopathy with Scientific Medicine in the Medical Department of the University as contemplated by the late act of the legislature. Of course the expression is not unanimous, as some of the presses are under the control of Homœopaths, while the conductors of others are unacquainted with, and indifferent to the matter; but we have no doubt that all the papers as well as all the people not desirous of the destruction of the Medical Department of the University and of legitimate Medicine in the State, after understanding the subject, and "sober second thought," will oppose by all the necessary means, the unnatural union of things totally incompatible attempted to be effected, and will triumphantly sustain the Regents in going firmly forward in the proper exercises of their legitimate powers, and omitting to do what they well know the vital interests of the University utterly forbid.

The following extracts are from two among the most reliable papers in the State. The first is from the *Tecumseh Herald*, whose editor is a lawyer of candor, of standing and ability, and associated in the practice of that profession with one of the ablest members of the present State Senate.

The opinion incidentally expressed on the powers of the Regents in the case, if any thing more can be needed than the plain words of the Constitution, we hope will have its due weight.

We may mention, in passing, that we have conversed with several members of the convention which formed the present State constitution, and have been explicitly told by every one of them, that the framers of that instrument intended to place the government of the University entirely in the hands of the Regents, and beyond the interference of the Legislature, and to remove it, as far as possible, from all political influences and disturbances of other questions. This most reasonable opinion at the time prevailed—that the Legislature could not be supposed to un-

derstand the affairs of the University as well as the Regents, whose sole official business it would be to study and secure its interests. We give the *Herald's* article entire:

"HOMŒOPATHY.

"We would call the attention of our readers to the strong and sensible article from the *Peninsular Journal of Medicine*, which will be found upon our first page. Were we ourselves a Homœopathist, which we do not pretend to be, we should still be of the same opinion that we now are with regard to the propriety, or even feasibility of attempting to mix up the whole Babel of Medical issues, or of any other issues, in our State Institution.

"If there is science and success in Homœopathy, which we shall not attempt to either affirm or deny, then let this doctrine, so antagonistic and irreconcilable with the present practice, be taught in a school by itself. There is the place where, if it be true, it will best succeed, and where, if it be untrue, it will do the least harm. But in the name of common prudence and common sense, we do hope that the Board of Regents, who are the only constitutionally appointed guardians of the interests of our cherished State University, will do no such foolish thing as to place in it a set of antagonistic Professors to wrangle and call each other stupid blockheads, arrant quacks, or as is far more likely to occur, and as is we think strongly intimated in the article alluded to, to place a Professor of Homœopathy there, to blow up our present flourishing Medical Department of the State University, and drive its present excellent and efficient corps of Professors all out of their seats.

"If our State Legislature desire the establishment of a State Institution of this kind, then let them pass a law establishing one by itself, and without attempting to mix it up with things, that every body knows, or ought to know, will not mix, and endow it as richly as they please from our State funds—but if, on the other hand, it was their determination that there should be no other Medical Institution in the State except one wedded to Homœopathy, then have they taken, except for the checks which the Constitution, and a Board of Regents elected by the people, as much as they imposed upon them, the very course most likely to secure this result.

"It may be that the popular feeling of the State warranted the action taken on their part, but we confess ourselves taken quite by surprise, if it is so, and acknowledge that we are not quite prepared to believe it. So far, however, as their action is legitimate, and Constitutional, it should be regarded, but so far as it is illegitimate and overrides, or attempts to override the authority constitutionally vested in the Board of Regents, it should most certainly be disregarded.

"At any rate, we commend the article from the *Journal of Medicine*, on our first page, to the candid and attentive perusal of every one, and we think its good sense cannot fail to convince even Homœopathists themselves, of the soundness of its positions."

The extract below is from the *Michigan Argus*. The editor, after alluding to our article in the last number of this *Journal*, and to the fact that the "Law Department," specified in the organic law of the University, has no Professors yet appointed, &c., closes his article with the following sensible remarks:

"It would, we doubt not, be worse than nonsense to attempt to teach different religions, or different political creeds in the same school, and we don't believe that medical creeds so diametrically opposite as Allopathy and Homœopathy can be taught together to any better advantage. If the State must teach both systems, we should say let them be taught in separate Institutions."

The Microscopical Anatomy of the human body in health and disease, illustrated with numerous drawings, in color, by ARTHUR HILL HASSALL, M.D., &c., &c.; with additions to the text and plates, and an introduction, containing instructions in Microscopic Manipulation, by HENRY VANARSDALE, M.D. Two volumes. Published by S. S. & W. Wood, 261 Pearl St., New York, 1855.

This work is an American Edition of the first full treatise on Microscopic Anatomy published in England, with important additions by the American Editor.

The first volume contains 560 pages of text with a full and valuable index. The second, contains 79 plates nearly all of which have several figures, accompanied with appropriate explanatory reference. Here the reader will find drawings of most of the fluids and solids of the human body appropriately colored.

Mr. Hassall is an eminent English Microscopist and has availed himself of the many important advantages of his associations to furnish a valuable work and great credit is due the American Edition, and the enterprising publishers who, jointly, have made it far preferable to the English Edition.

Among the important additions the reader will find nearly 40 pages, devoted to matters of practical value, if he proposes to do any thing with the Microscope. His subjects are discussed under three heads:—

- I. Microscopes and their accessory instruments.
- II. The preparation of objects.
- III. The preservation of objects.

The first division leads him to give important information concerning instruments—their manufacture, value, &c. In this he aims to do justice to the merits of the Microscopes of Mr. C. A. Spencer, of Canastota, New

York. This gentleman has already attained an enviable reputation, and the last we knew of him he was unable to supply the demand for his instruments. Under the head of "preparation of objects," we meet with just the directions needed by the inexperienced, while the third division will be found to contain information scarcely accessible elsewhere, and of the greatest importance for the preservation of objects once prepared.

At the close of many of the articles, brief but pertinent directions indicate the mode of proceeding, to get a proper display of the object investigated, here will be found many valuable suggestions.

To the American Edition are added 10 plates embracing among other views, several examples of finely injected mucous membranes, of various localities.

We are glad to see so much valuable information offered to the profession as these two octavo volumes contain. We hope time will soon allow a more careful examination, for we like the book and believe its readers will approve the judgment.

Sanitary Reports of the City of Buffalo for the year 1854.

This is a careful and truly valuable report and reflects great credit on Dr. Newman, the Health Physician, who drew it up. Among other important information we call attention to the tables showing the connection between meteorological phenomena and the prevalence of epidemics. This obscure and important subject is at length beginning to assume a tangible form and to attract the notice of the medical profession, although few know the toil necessary for the production of the tabular results such as this report contains.

It is from a conviction of the growing interest and medical importance of this subject that we are now monthly publishing a number of most careful and accurate meteorological tables.

It appears by Dr. Newman's report that in Buffalo the presence of cholera last summer followed very accurately the changes in the moisture of the atmosphere, and that in this ingredient of the medium around us lies in a great measure the cause of many epidemics. We have formerly shown that the cholera in Detroit followed the same law, and in-

Omission.—Having mis-laid, by some unfortunate accident, Professor Winchell's Meteorological Tables for February, his valuable record for that month will have to be postponed until next number. Some other important matter is also delayed.

E.A.

Error of Position, by Prof. MILO.

This is a vulgar, stupid pamphlet, sent to us by some quack in Tennessee. It consists of low, filthy declamation against the American Medical Association, and the code of ethics of the profession. It is probably the work of some patent medicine vender who thinks to be glorified by having it said that he has fought with the National Association.

Transactions of the New Hampshire Medical Society.

This is a record of the *sixty-fourth* annual meeting of that society. It contains,

- 1st. An address by the President, Prof. Smith of Dartmouth College.
 - 2nd., An oration on the Poetry of the Medical Profession, by Dr. M. Farland, Supt. of the Illinois State Hospital for the Insane.
 - 3d. A dissertation on pathological chemical changes in the body, by Dr. Mason, and sundry appendices. We are glad to see this ancient society so hale and flourishing.
-

Medical Book Store.—We call attention to the advertisement of S. S. & W. Wood in our appendix.

MISCELLANEOUS.

The New York Academy of Medicine has offered a prize of \$100 to the authors of the best essay on the subject of *Cholera Infantum*. Communications must be addressed to Dr. Joseph M. Smith, No. 11, east 17th street, New-York, before the 1st of January, 1856.

At the recent commencement of the Medical Department of the University of New York, the degree of M.D. was conferred upon 106 young gentlemen. The number in attendance upon the schools the past session is stated to be 307. We have not the statistics of the other schools of New York.

Singultus.—Dr. Upshur, of Virginia, thinks this symptom, so ominous of the sinking stage, and so exhausting in itself, depends upon spasm of the diaphragm, whose attachments are chiefly to the ribs and cartillages. He proposes to relieve it by applying a bandage tightly around the lower part of the thorax, by which the muscle is so relaxed that the spasm ceases. He has seen this simple remedy give relief after every other had failed, and, therefore commends it with confidence. He considers it as a valuable aid, also, in the relief of some cases of chronic vomiting, not dependent upon organic diseases of the stomach.

Solidified Milk.—This is made by adding to 112 pounds of fresh milk 28 pounds of white sugar and a tea-spoonful of bi-carbonate of soda. It is then evaporated in a water-bath at a moderate temperature, being stirred and agitated all the while, but so moderately as to avoid churning. In three hours it assumes a pasty consistency, and by constant manipulation and warming it is reduced to a rich, creamy-looking powder. It is then exposed to the air to cool, weighed into parcels of a pound each, and pressed into a brick-shaped tablet, which is covered with tin foil.

This will keep for any length of time, and may be grated and dissolved in water for use, answering all the purposes of ordinary milk, even to the making of butter. Our ships and steamers will find this solidified milk convenient and economical, and it may come into general use in cities. It is particularly convenient for use in sick-rooms and hospitals.

We extract from the *American Medical Monthly* the following prescriptions, collected from various sources among living American practitioners. The following combinations of prussic acids constitute convenient and efficacious formulæ:

℞ Acidi Hydrocyanici, Medicinalis, gtt. lx.
 Morphiæ Sulp. gra. iij.
 Tinct. Sanguinariæ.
 Vini Ipecacuanhæ, aaf. ℥ss.
 Syr. Pruni Virginianæ. } f. ℥v.
 Vel Misturæ Amygdalæ. }

M. Dose. A small spoonful to be taken twice or three times a day, or,

℞ Acidi Hydrocyanici, gtt. xl.
 Vini Antimonii, f. ℥ss.
 Syrupi Tolutum, f. ℥iss.
 Mucil Acaciæ, f. ℥ij.

M. Dose. Teaspoonful twice or three times a day.

The following formula for whooping cough:

℞ Acidi Hydrocyanici, Medicinalis, gtt. xxv.
 Vini Ipecacuanhæ, f. ℥ij.
 Syr. Tolutam, f. ℥j.
 Aquæ Distillatæ, f. ℥iij.

M. Dose. Small teaspoonful every four hours.

This should be given early in the disease, as soon as the characteristic whoop appears.

Care should be taken that this prescription should not be carried too far lest debility be induced.

Now, in cases of chronic bronchitis with a peculiar irritable condition of the stomach or broncho gastritis, the following will often be found very useful:

℞ Acidi Hydrocyanici, Medicinalis, f. ℥j.
 Liquor Potassæ, f. ℥ss.
 Infus. Columbæ, f. ℥ij.
 Misturæ, Amygdal, f. ℥iv.

M. Dose. One teaspoonful three times a day.

The following will be found applicable in irritable gastric dyspepsia:

℞ Extract, Belladonnæ, gra. x.
 Acidi Hydrocyanici, Medicinalis, gtt. lx.
 Tinct. Columbæ. ———
 Syr. Simp., aa. f. ℥j.
 Aquæ Distillatæ, f. ℥ij.
 Misce.

As the strength of the different medicinal acids cannot be depended on as being always of the same uniform power, it has been proposed that the cyanide of potassium be substituted in medicine for the hydrocyanic acid.

℞ Cyanidi. Potassii, gra. xxii.
 Alcohol, Officinalis, f. ℥xi.
 Misce.

This preparation of cyanogen, which possesses the same medicinal qualities, and is of the same strength with the hydrocyanic acid, is greatly preferred by many practitioners as a therapeutic agent, in as much as it can be depended on as being always of an uniform strength. It may be used in the same doses and under the same circumstances in which the hydrocyanic acid is administered.

Rheumatism.—In the New York Hospital the plan of treatment pursued is to give, in case of undue excitement, a mixture of epsom salts and tarter emetic, until the excitement is reduced. Then Rochell's salts is given in dram doses every two or three hours, until the urine is rendered alkaline. A lotion of carbonate of potash, one ounce, with two drams of tincture of opium to a pint of water, is used as an external application. The salts sometimes cause ulceration about the fauces, but do not act too severely on the bowels. The urine is tested in all cases and found to be of acid reaction. The perspiration, too, has an acid odor. The urine is rendered decidedly alkaline in an average of five days' treatment, the longest period being twenty, and the shortest two days. The average amount of the salts administered is five to seven ounces. The beginning of improvement coincides generally with that of the alkalinity of the urine, and is permanent. The alkaline treatment diminishes the frequency of cardiac complications.

Fecundation.—Dr. Martin Barry has repeated all his former experiments as to the ovium, and various other Germans, the English physiologist proves to have been true from the beginning. He has recently shown spermatozoa in large numbers in the body of the ovum.—*Lancet*.

Chloroform for Hiccough.—I am not aware that it is generally known that chloroform is a specific for *hiccough*. I have used it for these last four years for checking it, and I have not failed in a single instance. A small quantity does, and I repeat it as often as the hiccough returns. Two or three applications generally prove successful.—*Dublin Medical Press*.

Acne.—Cazenave has recently recommended ammoniacal lotions, which form, with the fatty matter of the follicles, a soluble soap with an ammoniacal base: the hydrochlorate or acetate of ammonia answers equally well.

Is Traumatic Phlebitis a Contagious Disease?—[In conversation at St. Bartholomew's Hospital, this question was brought up by Dr. Simpson, at Edinburgh. It arose from the fact of the great frequency of phlebitis after operations.]

Dr. Simpson stated his conviction that plebitis is essentially in the same category as puerperal fever, some forms of erysipelas, &c., and that it is capable of being conveyed from patient to patient by the surgeon, just as the accoucheur is well known to convey the latter diseases. He believed that the operator's hands, or even the knives used, might thus be made the means of transmitting the morbid poison. In support of the opinion, an instance was adduced in which a surgeon had, on account of the extreme prevalence of phlebitis among his patients, been obliged to desist for a time from operative practice.—*Med. Times & Gazette.*

Sore Nipples.—M. Bourdel recommends the application of a piece of lint dipped in the tincture of benzoin placed over the part, then removed, wetted with the tincture, and replaced, so as to cover the ulcer with a layer of liquid. The first application is painful, but the pain seldom lasts more than fifteen minutes; the tincture forms a coating, which the action of sucking does not displace.—*British and Foreign Med. Chir. Review,*

On Gout and Rheumatism.—In a paper on this subject read before the Royal Medical and Chirurgical Society, Dr. Garrod shews that in 177 examinations of the blood, taken from 148 separate patients, in every case of genuine gout an abnormal amount of uric acid was found, while in acute rheumatism such was not the condition.—*London Lancet.*

Treatment of Chorea.—Sulphate of zinc is undoubtedly the remedy in most general use for the treatment of the ordinary forms of chorea in the London Hospitals. It is usually given in small doses at first (gr. j. to ij.) and gradually increased if the disease do not yield (gr. v. to vii.) Among other remedies in much esteem must be noticed the various preparations of iron, quinine, valerian, the ammonio-sulphate of copper, the iodide of zinc, and arsenic. In St. Thomas' Hospital, Dr. Baker frequently prescribes, in severe cases, the last mentioned remedy. He states that he has several times cured very quickly by its means, cases which had proved obstinate under other treatment. The dose is, of the liquid arsenicalis, three minims for a child, and from five to six for an adult, given in a bitter infusion three times daily. Chorea, in its more ordinary forms, is, as is well known, curable with tolerable certainty by almost any of the nervine tonics; hence the number of species which have been boasted against it.—*Med. Times and Gazette.*

THE
PENINSULAR
JOURNAL OF MEDICINE
AND THE COLLATERAL SCIENCES.

VOL. II.

MAY, 1855.

NO. XI.

ORIGINAL COMMUNICATIONS.

ART. I.—*Transactions of the Michigan State Medical Society.—
Third Annual Meeting, held at Ann Arbor, March 29th, 1855.*

MORNING SESSION.

The Society was called to order by the Secretary, the President being temporarily absent, and Prof. Palmer was elected President, pro tem. After calling the roll it was moved and carried that the reading of minutes be dispensed with. The following gentlemen were then proposed and elected as members :—

Dr. M. Stewart, of Detroit.
“ Russell, “
“ W. Cowan, “
“ D. Henderson, “
“ J. A. Brown, “
“ Bailey, “
“ L. G. Robinson, “
“ Du Boise,
“ J. C. Searle,
“ J. C. Clements,
“ Ira Backus, of Jackson.
“ A. Gorham, “
“ J. Tunnichiff, “
“ Z. Bliss, Ionia.
“ H. Taylor, jr. of Mount Clemens.
“ Bancroft,
“ Leonard,
“ Noble.

The following gentlemen presented credentials, and took their seats as delegates from the Detroit Medical Society.

Dr. L. G. Robinson,
" Davis Henderson,
" Morse Stewart,
" Jas. A. Brown,
" Edward Batwell.

Rev. Dr. O. C. Comstock, and Dr. Geo. Lee, jr., were proposed and unanimously elected honorary members. Dr. Brodie moved that a committee of five be appointed to nominate officers for the ensuing year, which being carried, the chair appointed Drs. Brodie, Backus, Russell, Beech and Denton.

It was also moved and carried that a committee of three be appointed to report resolutions expressive of the sense of the society on the death of the Vice President, Dr. A. Murray, of Niles. The chair appointed Drs. Beech, Stewart and Brown. It was moved and voted that a tax of one dollar be levied on the members. The society then adjourned to 2 1-2 o'clock P. M.

AFTERNOON SESSION.

The society assembled at 2 1-2 o'clock, and listened to the following Address by the President, Dr. H. Taylor, of Mount Clemens, which was referred to the committee on publication.

ADDRESS.

GENTLEMEN :

Time-honored custom as well as the constitution of our society impose upon me the duty of addressing you at this time. Were I to consult my own inclination, conscious as I am of the greater importance and benefits of your own deliberations, and considering the brief space of time allotted to them, I would not for a moment trespass upon your valuable time, but it is not proper to disobey the precedent and obligation which rests upon me.

Since the first organization of society, and I might say since the creation of Man, the science of medicine has ever been regarded as one of the greatest importance. At all periods of time, even when "darkness covered the whole earth and gross darkness the people," the healing art has been a subject of interesting study and research. It has pleased Providence to withhold the light of revelation from this subject and leave man

to enquire by his own industry into the singularities, laws and mysteries of his being, and to search out from the great storehouse of nature the enquiry wherewith he may remedy the many "ills that flesh is heir to."

It is not my design however in this discourse to go back into the early history of the science, but to discuss a topic which has greater claims upon our attention, viz: what the condition of the profession has been in our own country.

Until within a few years our profession and science have been more or less generally under the protection of positive laws; acts being passed by the legislative councils of different states to regulate the practice of Medicine and Surgery. Such laws existed in our own state, and they continued to exercise a guardianship over the profession by affixing various penalties to irregular practice until the year 1852, when all laws relative to it were finally repealed. And such you are aware, gentlemen, is the condition of the profession in respect to legal enactments in nearly all the states.

The opinion of every observer will bear me out in saying that these laws, to some extent, restrained the wide spread of quackery, but I confess, it is not so clear to me that they contributed anything material to the advance of medical science.

The sanction of the law being the passport to respectability, the student too often was more ambitious to obtain the title of M. D., and the license to practice, than he was to secure such a skill and knowledge of principles as would fit him for usefulness. Having attained to his title he considered that the law was now responsible for his professional character, so that he was at perfect liberty to make room for himself by waging a disgraceful war of extermination with all other physicians who might chance to be in his way.

As the law protected him from quacks, and allowed none but regular physicians to practice, he had only his own brethren to quarrel with, and had nothing to impress upon him the disastrous results which would follow such a disgraceful lowering of the professional standard. I do not claim that the laws are responsible for all the wrongs, but only that the profession was not elevated by them, and derived no benefit from them however needful they may have been to the safety of community or the protection of humanity.

Had our own conduct been irreproachable in these respects, had we been more just and respectful to each other before the eyes of community

while under the action of the laws, nothing could have restrained the public from visiting with the weight of their just indignation those legislators who were endeavoring to press us down to the loathsome and degraded level of the quack. It is painful to allude to these errors of medical men, and had they been as harmless as they have been unprofitable, I would gladly pass them by, but contention and bad faith have had such a depressing effect on professional character that it is necessary to mark these things with their merited condemnation, for they have been more prolific of mischief than all the efforts of quackery combined.

In another way our law makers have done one mischief which far exceeds the evil of repealing the old enactments, and that is in chartering quack institutions, and thus licensing fraud, and giving it the authority and sanction of law.

No humbug, however ridiculous or absurd, but could obtain their chartered privileges. Thompsonianism, that sickening system, Homœopathy, that sweetening performance, and Eclecticism, that conglomerate mass, could all flourish their legal claims, and alike defy science and truth.

Indeed, gentlemen, when such delusions received the endorsement of our legislatures it was not possible that the true science of medicine could be essentially benefited by any enactments which they might pass. Was it not high time that we cut us loose, and betook us to our own resources when they proposed to gather every foul bird under their wings with us, and link us in loving brotherhood with these sapient pretenders? The Homœopathist, Hydropathist and Thompsonian differ widely from each other, indeed they are at perfect antipodes, each claiming themselves alone to be right, the rest then must necessarily be wrong; yet their various charters all bear the same legal authority, and thereby the law says they are all right, and that the public good requires that they should all receive support.

But let them go, their days are numbered. The overpowering tide of human intelligence is fast sweeping over them, and their memory will soon be buried deep in the waters of oblivion, or they will only be remembered to be despised.

But we may not think, gentlemen, that when these silly delusions moulder away and decay, the medical atmosphere will be left pure, for from their noxious vapors may spring up and vegetate other kindred scourges equally destructive to human happiness and human life.

“In folly’s cup will still laugh the bubble quackery, and that bubble

will forever laugh while there is ignorance to be duped or credulity to be operated upon."

Another most fruitful source of evil has been the legalizing of what purports to be regular schools, with the privilege of conferring the title of M.D., after but one course of lectures, and that of only twelve or sixteen weeks, while the graduating fee was regarded as the most important qualification of the candidate. Organizations have actually been made under such charters, and managed by men who were alike regardless of their own good name, and of the interests of community.

In view of these things, is it at all wonderful that the implicit confidence of the public in the medical character should be somewhat shaken, and ought we not to rejoice, rather than complain, that the law has nearly staid its unskilled hand from meddling with these topics?

We contend, that upon the subject of our profession, the law has done either too much, or not enough. If it truly intended to protect the public—if it designed to defend against fraud and deception—then it has done too much by legalizing these discordant systems; but if it intended to destroy us, then it has not done enough, for the science of medicine still stands, and bids defiance to all its puny efforts. It raises in unequalled heights its proud and noble standard, and unturls to the breeze its matchless banner, on which are inscribed, in glittering capitals, Relief—Hope, and Charity.

Yes, gentlemen, and it will ever stand firm as the pillars of truth, and must ultimately triumph over all opposition, to the shame and contempt of all those who seek to resist its glorious destiny.

It would be more pleasing could some of the recent acts of the legislature be passed over in silence. I refer to its attempt to thrust into our educational centre an off-shoot of Homœopathy. The plan of those who urged this measure upon the legislature, was doubtless to create an odious combination of quacks with physicians, in the University, knowing perfectly well, that if this was accomplished, the regular profession would withdraw its countenance from it, and either destroy it or leave it to their hands alone, and thus either destroy the chief instrument of our warfare, or else get possession of it themselves and turn it against us.

It is disgraceful that our law-makers, not perceiving, or not caring for the object, sold their influence to help on the plot. It is a burning shame at this day, when railroads, canals, and telegraphic lines stretch from lake to lake, and all the enginery of civilization and power are rising majesti-

cally towards perfection, and when the University was rapidly becoming the crowning glory of the whole, that a legislature could be found so stupid or so reckless as to make *even this futile attempt* at a heart-stab against our central institution of learning. Is it possible that there is a heart in Michigan so base and degraded that it does not swell with proud emotion at the splendid unfoldings of our system of education, and the institutions of learning pertaining to it? Is there a head so weak or so depraved that it would blot their fair fame, cripple their usefulness, and make them succumb to the selfishness of unprincipled and hated demagogues?

I know that we have true-hearted statesmen, whose hearts revolt at the villainy, and that were we to ask them, they would say, that not upon the good and true rests the sin: that they who advocated the act to establish a chair of Homœopathy, were, for the most part, the brainless demagogues, and that the same men would, if they thereby could obtain any selfish end, urge the establishment of a chair of Uroscopiœ, Eclecticism, or any, or all other humbugs of the present or future time.

Happily, however, this matter, by the constitution of the State, is placed in the hands of the Regents alone, and we are assured by our most eminent and learned jurists, the legislature has no more power to control the action of the Regents than the Regents have to supervise its weak and boyish legislations.

Still, in one point of view, this act will work out its mischievous ends. We are a "law-serving people," and the community holds the mandates of its government in the highest respect. Hence, when the fiat went forth which carried the implication that every variety and species of practice stood on an equal footing, the unwary and the innocent were taught by it to believe that all were possessed of equal merit. How does this differ in effect from warming into vigor the frozen viper, whose venom is death, and then throwing it, out-stretched, into the laps of our children, to inflict upon them its certain and fatal sting?

The abolition of all legal distinctions between physicians and quacks is freighted with the same fatal effect on the popular mind, but, disastrous as it seemed at first, the heaven-born science of medicine could never be washed away.

" Truth crushed to earth will rise again,
The eternal years of God are hers,
But error wounded writhes in pain,
And dies amid her worshippers."

That was a dark hour when the protection of law was first withdrawn from the profession. Our chartered societies were suddenly disorganized, and their members turned upon the common field, where the motley crew of charlatans were dealing out their never-failing panaceas. Science stood aloof and blushed at the outrageous gambling in human life, while ill-gotten lucre poured with full stream into the coffers of quackery. But this is not the first time that men have yielded to temptation, or that hypocrisy and treachery have prevailed. Christianity is not disproved, though Judas betrayed his Lord and Master, nor do Liberty's charms prove less pleasing, though Benedict Arnold, once freedom's boasted son, turned traitor to his country.

I have drawn this dark picture of consternation only that I might faithfully chronicle the history of the past. But, gentlemen, I will not dwell upon these painful recollections, the present and the future come to us laden with exhaustless riches.

" 'Tis an ill wind that blows no good."

The tornado that has been sweeping over us has had a tendency to arouse our sleeping energies and purify our air. Those whose ignorance and love of deceit made them an incubus upon our army, have been lured out of our ranks by the ignes fatui of false systems and now separate from them, we are justified, and even prompted by an injured community, in shunning those whose conduct and demeanor had impressed so foul a stain upon our professional escutcheon.

Though laws, quacks, and humbugs, have assailed us on every side, though the public confidence was shaken for a time, and though avarice swayed some from their duty, yet can we not truthfully say that the medical profession was never in a more prosperous condition than at the present time.

We may add that a laudable spirit of emulation exists now among our members unequalled in the annals of past time. The deep tide of public favor is fast rolling back upon us, and millions of grateful hearts are bidding us God speed in the great work of medical reform.

Nature, as if to make amends for the past, is now yielding up secrets which have lain in darkness since the foundation of the world. The boundless realms of science are opening up to us their exhaustless treasures, and inviting us to explore their wide domains. Hardly a day rolls over our heads without our hearing of some new and wonderful invention

or discovery in medical science, and with such rapidity do they follow each other in their course, we have scarcely time to become familiar with the use of one before another is introduced to the astonished world. I repeat it, then, gentlemen, that the science of medicine, notwithstanding the many obstacles in its way, is in a far more flourishing condition to-day than any former period in its history.

It will be interesting to trace the causes which have contributed so much to the elevation of the profession.

The first, and greatest, I conceive to be the heart-felt determination exhibited by every true physician to raise his calling above reproach, and give it that eminence which its exalted merits demand. This desire, so universally felt, could not remain inactive, and calls from every part of the country were heard urging the profession to band together, and by union of efforts to restore itself to its high and ancient honors. No longer aided by law, medical men were driven, by force of circumstances, to organize into societies, whereby they might bring into effective action a concentration of all their energies. Already these mutual-improvement associations have become numerous throughout the Union, diffusing their beams of light and knowledge over a grateful people, and harmonizing those discordant elements which have too frequently retarded the progress of science.

With feelings of patriotic pride, I am happy to say, gentlemen, that we in this State have not been idle. Young Michigan has placed her vigorous shoulder to the wheel and is moving on among the first and foremost in the great and glorious cause.

In connection with these District, County, City, and State Societies, we have now an organization which embraces the whole Union—stretching from the blue waters of the Atlantic, on the east, to the dancing billows of the Pacific, on the west.

That sentiment of union, which, at first, was only local, began to animate the great medical-heart of the nation, and in the year 1847, nineteen States responded to a call, and laid the foundation of the American Medical Association. Since then, all the other States have been added to swell the ranks, and the untold benefits to our science can no longer be a question.

Nearly eight years have more than rewarded our labors; in reconciling the various and conflicting interests of the medical community, in devising well-concerted plans of operations, and restoring that unanimity of

feeling and friendly intercourse among medical men, so essential to the prosperity and well-being of our profession. Still, it is in its infancy yet, as are many of the local organizations in most of the States.

To surmount all obstacles, and raise to eminence and fame is not the work of a day. Active and zealous co-operations can alone accomplish this end, by firm and progressive steps.

This united association of the profession in our country, I verily believe will do more to disseminate light, truth, and science, than the most despotic laws that could be enacted to favor medicine, and prohibit imposition.

It has already sent out a code of ethics, so reasonable and just in their character, as to excite the admiration of the enlightened world, and which meets with universal approbation in the hearts of all medical men.

He who will not embrace them, must forfeit his claim to our fellowship and confidence. But, gentlemen, I must not neglect the interests and concerns of our own State.

Strong as may be our sympathy with the profession in every part of the globe, there will still rise up a selfish feeling of pride in the domestic affairs of home.

I need hardly add, that the claims of medicine—the honor of our profession—and the interests of community, on this peninsula, urge us into the enterprise in which we are engaged to-day.

The desire to share in the advancement and elevation of the profession in general, has become strong and ardent throughout the State. Prompted by the examples of our brethren in other parts, and the safety of the public for whom we labor, we are now striving to become more united and useful in the important trusts of our high calling.

The alarming character and fatal tendency of some of the diseases that have prevailed in our State during the past few years, have awakened the anxieties of community, and aroused attention to the necessity of a more general and thorough investigation. And where else can they look for relief—and for a solution of these causes, but to the medical profession? If we fail to discharge these reasonable duties, have they not a just and sufficient ground to complain?

The noble deeds of the highest grade of natural talent—the greatest energies of our most eminent physicians in every land—and the approbation and encouragement of a highly intelligent people, are stimulating us on in the discharge of these our obligations.

Is it possible that any who have the good of our profession, or the interests of society at heart, can be indifferent to these promptings? Is there any other way to accomplish this object, independent of association and concert of action? Would it not be ruin for isolated individuals to attempt this work—the work of all—and where all should be equally engaged, to insure a hope of success? Shall it be said of the physicians of this State that they shrink from this important duty, and leave their work undone, or done by others?

I spurn such reproach, and, in behalf of the profession in Michigan, can proudly answer—No!

In conclusion, then, gentlemen, let us “be of one mind and one heart;” “A house divided against itself cannot stand.” The ant, the bee, the millions of coral insects in the briny deep—and, in short, all nature, both animate and inanimate—teach us the important maxim that “Union is strength.” And if we rise in our contemplations from the more insignificant, and take a survey of the eventful history of men and nations, we shall find the same great truths everywhere verified.

Can you point me to any great or decisive object that has ever been attained, without a unity of purpose?

Our nation’s glorious Independence, and the pure air of Freedom which her noble sons inherit with so much pride, were secured by the united efforts of a handful of men, against one of the most formidable enemies in the universe.

Greece, once powerful and great, when all her petty States were bound together as one, could drive back and repel the multiplied hosts that sought to invade her dominions; but no sooner had the bands been broken, than she fell, and her wise men and sages were doomed to slavery and death.

When the nations of earth had conceived the great plan of thwarting even “the strong arm of the mighty,” they assembled together with a unity of purpose on a wide plain in the land of Shinar, and there commenced building that stupendous Tower of Babel, whose top was to reach unto heaven. The Lord said: “Behold, *the people is ONE.*” . . . “And this they begin to do, and *now nothing will be restrained* from them which they *imagine to do.*”

If such is the strength and omnipotence of *union*, that nothing less than Omnipotence itself *can confound*, may it not, then, be the armour of our profession, engaged in the great and laudable purpose of alleviating the ills of suffering humanity?

But, my friends, why need I waste more time in proving to rational minds what is so visibly seen in the constitution of nature? We meet men of this union, in the ranks of our profession, to shield the public, and protect the innocent from the false pretender, who, by the boldest promises and most daring lies, imposes upon the credulity of the ignorant, and seeks to enrich himself at the expense of human woes and human suffering.

After the President's Address, business was resumed. The Secretary being absent Dr. Brodie was chosen Secretary, *pro tem*.

The committee for nominating officers reported the following:—

For President, Zina Pitcher, M.D.; for Vice President, J. H. Beech M.D.; for Secretary, E. Andrews, M.D.; for Treasurer, S. H. Douglass, M.D. The report was accepted, and the committee discharged, and on motion the nominees were declared unanimously elected.

The committee to report resolutions on the death of the Vice President offered the following, which were unanimously accepted and adopted:—

Whereas the mournful intelligence has been received of the death of Andrew Murray, M.D., late Vice President of the Society, and the delegate of the National Medical Association, held at St. Louis, on May last, be it hereby

Resolved, That we have received with profound sorrow the announcement of this dispensation of Providence.

Resolved, That in his death the community have lost an active and judicious physician, and the profession one of its treasured ornaments.

Resolved, That this Society most deeply sympathize with the relatives of the deceased in their bereavement, and that a copy of these resolutions duly authenticated be transmitted to them.

Resolved, That the above preamble and resolution be published in the Transactions of the Society.

The committee to revise the constitution then reported, and the revised constitution, after certain amendments, was adopted.

The committee on the Geographical Distribution of Diseases being called, reported that it had not been able to collect from the profession the desired information, and asked to be discharged. It was moved and carried that the committee be discharged.

The committee on epidemic and endemic diseases gave the following report, which was referred to the committee of publication:—

REPORT OF THE COMMITTEE ON EPIDEMIC AND ENDEMIC DISEASES.

At the last annual meeting of this society, the following action was taken:

“Resolved, That the Society shall be a Committee of the Whole” on Epidemics, and each member is hereby required to keep a record of such epidemics as may prevail under his immediate observation, carefully noting their special peculiarities and treatment, and annually transmit an abstract of his observations to the President of the Medical Faculty of the University of Michigan, in season for said Faculty to condense the information thus obtained, giving each practitioner credit for details furnished, and to present the same, in the form of a Report to the Society, at each annual meeting, and that to ensure the response of the profession, the Faculty be requested to send a circular to various parts of the State, asking information on epidemic and endemic diseases, and the success of the treatment instituted.

In accordance with the above request, the faculty beg leave to submit the following report, premising that, as the communications of members of the Society were not promptly sent in, there has been no time to condense the information, nor to furnish a copy for the use of the Committee on Epidemics, of the National Association, as required by the resolutions passed a year ago. In lieu of condensation, therefore, we must embody the several reports entire. We will consider, first, the several localities referred to, and afterwards present what brief generalizations the time will permit. The reports embrace various parts of this and the adjoining States, and even some regions more distant than was contemplated in the resolution of the Society. We shall present the reports which pertain to this State first, and afterwards those which embrace other sections.

We commence with the southern tier of counties.

Monroe County, situated at the S.E. corner of the State, and abutting upon Lake Erie, is a level region, underlaid with silurian limestone, which is exposed in certain places. The soil is a rich black vegetable mould, in some places, and in others a yellow sand. The forests are of beech, maple, elm, hickory, &c. In certain parts there are extensive marshes, and but sparse settlements, while in others the population is abundant. Many of the marshes are simply covered with coarse grass. Monroe City is situated on the River Raisin, three miles from the Lake. The River at that point falls over rapids with a limestone bed. Eastward, the face of the country drops suddenly down to the level of an open marsh

which reaches to the Lake. Westward, is a handsome country partially settled, and partly presenting large expanses of forest.

The city of Monroe was visited with cholera with some severity during the last summer. An account of the epidemic may be found in the *Peninsular Journal*, vol. II. p. 292, written by Dr. F. L. Muller. He states that its first appearance was ambiguous, so that doubts of its real character were entertained, but soon after it dispelled all doubt, and from the localities where it first appeared, we understand him to say, that it spread, sometimes by radiating in every direction, and sometimes by traveling forward in a direct line, in one direction only. In most of the cases he found the discharge, per mouth and per anum, to be lacking in bile, and in these commenced the treatment by giving an emetic, after which reaction was easily established and convalescence followed. In erethic cholera he derives great satisfaction from the use of strychnine, nitric acid, and turpentine. Typhoid fever followed in only one case. This, after long obstinacy, yielded to aromatic stimulants, and animal diet.

The other counties of the southern tier are reported to us by Dr. J. H. Beech, of Coldwater, who traveled through them for the express purpose of collecting information, and was thus able to present a very valuable contribution, which we embody entire:

REPORT ON EPIDEMICS AND OTHER DISEASES OF SOUTHERN MICHIGAN,
PREVIOUS TO JANUARY, 1855.

ADRIAN CITY, LENAWEE CO., MICH.—His Excellency, Dr. Spaulding, was among the earliest physicians in this section. Diseases usually ascribed to miasmatic influences, were so common, and with so little variation, as to render medical duties almost monotonous, until about the year 1847. In that year agues, intermittent and remittent fevers, gave place to dysentery, of which he could give no particular account, except that derangement of the chylopoietic viscera bore about the same relation to it which it had to previous endemic diseases. He had observed less tendency to periodicity, and more to active local inflammations since that year. Sporadic dysentery had been common before, and has since, but no epidemic ever prevailed here.

In 1843 or '44, chylous diarrhoea was very common among children, and rather severe. In 1835 or '36, erysipelas attacked a considerable number with severity, and one or two cases were fatal. Small-pox had been in the county several times, but never severe. The same was true of measles,

scarlatina, etc. Cholera morbus had been common in summer. Asiatic cholera had destroyed a few victims here. Dr. S. thinks that less than half a-dozen cases have occurred here.

Dr. Hoyt thinks no epidemic of decided features has ever occurred here. Sporadic dysentery and other affections of the digestive organs, etc., are common in summer. During the summer of 1854, one case of cholera came to his knowledge.

In January, 1854, a few cases of small-pox were in town.

Drs. S. & H. both mentioned *neuralgia*, of different localities, as very common. The treatment was like that for agues, etc.,—i.e., alteratives and tonics. Where some part of the face is the seat of pain Dr. H. had used croton oil, by touching the tongue with a probe which had been dipped in the oil; and administering *cicuta semen*, in powder.

HUDSON, LENAWEE Co.—Dr. S. M. Wirts came here in 1839, for a few years. Intermittent and remittent fevers were severe and more common than other affections. Recently pulmonary diseases were more prevalent, and consumption not uncommon. No severe epidemic had ever occurred here. In 1846, '47, dysentery prevailed more than usual, but was not severe. In 1848 typhoid fever was epidemic, but mild. Brownish diarrhoea attended the fever. Sporadic cases of the same character were seen in the two succeeding years. Dr. W. sets great value upon counter-irritation in fevers of this form. Mercurials he uses with great caution—believes it important to begin early to sustain the energy of the system, but is not in favor with quinine in large doses.

Three or four cases of small-pox had occurred here in a mild form. This Village is about ten miles east of the summit ridge, and is thought to be one of the healthiest in this part of the State.

HILLSDALE, HILLSDALE Co.—This is west of the summit ridge about six miles. The immediate vicinity is proverbially miasmatic. Intermittent and remittent fevers are very common and are apt to assume a typhoid grade.

In 1850, epidemic dysentery prevailed with a high degree of mortality. [My information is from a non-professional, but reliable source.] Dr. J. N. Mott saw rubeola, epidemic and severe, in February, March, and April, 1852. The same year malignant erysipelas was epidemic here, with a mortality nearly 25 per cent. In 1853, '54, small-pox appeared in the village, but only a few cases occurred. During 1854 (January) several

cases of mild erysipelas appeared; also, sporadic typhoid fever of severe grade. Dysentery was rather common in October.

JONESVILLE, HILLSDALE Co.—Drs. Andrews and Brewer had metagues and periodic fevers more frequently than other diseases, but continued, and typhoid fevers, had been more common within a few years than among the earliest settlements. In 1847, '48, epidemic dysentery usurped the place of intermittent and remittent fevers, being most prevalent on the lee side of streams, marshes, or shallow bodies of water; and also on the borders of the timbered land. [In such localities, fog-banks are generally found during summer nights]. This disease was particularly severe among aged people and children. Nearly half the attacks upon these classes proved fatal. The community was healthy after the subsidence of the epidemic. Mercurials were beneficial early in the attacks, and astringents—especially arg. nit.,—after alterative action appeared. In 1850 dysentery approached the epidemic character, but was more mild, showing, however, but little deference to quackery, those cases proving incorrigible that tampered much with *nostrums* or *empiricism*.

Epidemic erysipelas prevailed here in 1846, but we could get no farther account of it. No cholera ever occurred here. Cholera morbus was common but scarcely epidemic in 1850 and again in 1854. Rubella simplex prevailed epidemically in 1851 and '52, and spasmodic cases occurred in 1854.

In winter of 1853, '54, small-pox appeared in the adjoining townships N.W. (Scipio). The disease was not severe nor extensive. We could get no further account, except that we have traced this disease in the track of *one man* who traveled on foot from St. Joseph Co. poisoning the friends who unwittingly entertained him. It is said that he called on a physician at Coldwater who told him his disease and hurried him off, giving him a ride several miles on his way. The infection found its way, indirectly, from this man into the township of Algansea, in Branch County.

COLDWATER, BRANCH Co.—The year 1850 has been looked upon by physicians who have been long here, as a period of metamorphosis in the atmospheric constitution. Previous to that year local inflammations of acute character were rare. Diseases of the skin were the most common *acute* local affection, and these apt to become chronic. Prurigo, lichen psora, scabies, eczema, ecthyma, and impetigo, are still seen and described

by their appearance and characteristics as *fac similes* of early affections. In remittent and intermittent fevers of the same general grade, erythema would appear in some and not in other cases. Hypertrophy of the spleen and liver were among the most common chronic affections, while disease of the thoracic viscera were rare, except such as had been attacked in other States. Scarcely any forms of disease appeared which would not bear tonics and anti-periodics early in their course.

In 1842 an epidemic influence, which received the popular appellation, "*Tyler's Gripe*," prevailed extensively. It was succeeded by prostrating affections of the "*primæ viæ*" approaching the *choleraic type*. In 1846, erysipelacea bore heavily upon the community, and that type of diseases continued more common than usual till 1849. In 1848, Rubeola Anginosa, was epidemic; but we can obtain no particulars. During the same year a disease called "spotted fever" prevailed extensively. This formed a decided exception to the general fact in regard to local inflammations and the use of tonics. The brain and spinal marrow seemed highly inflamed, and the use of narcotics and stimulants, as well as tonics, were dangerous, even late in the disease. Venesection, mercurials, antimony, and counter-irritants were most successful. Dysentery appeared as an epidemic in 1840, and again in 1850. That of the former period was attended with frightful mortality among children. Remittent fever seemed contemporary and agues less frequent.

The same was observed in 1850, although the fevers at this time were more severe, remissions less distinct, and convalescence more tardy. When dysentery did not attend the fever, and continue after it, thoracic disease was apt to exist. More cases terminated fatally by pneumonitis than any other type. For the above I am chiefly indebted to Dr. S. S. Cutter, of this place.

Since 1850 this section has been comparatively free from ague and its kindred affections; although these are more common than other forms of disease, they are confined to the vicinity of shallow water or wet land. acute pulmonary affections are far more common, and new comers suffering tubercular phthisis do not enjoy an amelioration of their morbid symptoms as long as formerly. In 1851 scarlatina simplex was common, but scarcely epidemic. Three or four deaths were probably from this cause. An epidemic erysipelas visited the west part of the township of Ovid in 1852. [A physician who saw most of the cases, to whom we applied for dates and characteristics, thought he should prepare a state-

ment of the whole, and at two different interviews, deferred giving us the items]. About thirty-five cases appeared in a district two miles east and west by three north and south—lying on the east side of the west branch of the river, where a shallow pond spread over considerable marshy land. The district contained about 250 inhabitants. Two deaths were reported.

In February and March, of 1852, "parotitis," influenza, and measles, were endemic. Influenza was attended with excruciating frontal pains. All the cases of rubeola of which we heard were mild—unless the *smothering* and stimulating course was pursued—but all did not enjoy the expected speedy convalescence. In many, latent constitutional predispositions were aroused, or chronic local affections followed. One case under our care, of tuberculous habit, seemed to make rapid strides towards cachexia and softening. It was finally arrested, but is not cured. In another, pleuritis supervened, resulting in empyema,—cured by paracentesis. Another terminated fatally after four months disease of abdominal viscera, in which ascites was the most striking symptom. Paracentesis was objected to till too late to practice, and *no necroscopy allowed*.

Several others, equally diversified but less important, came to our hands.

About the first of January, 1854, small-pox appeared, as above said; in the township of Algansea, seven or eight cases occurred and were not recognized at first, being under the care of an empiric. One terminated fatally before correct diagnosis was made, and two others afterwards under the care of a regular physician. The influence of vaccination here was most cheering. In this connection, we would press upon the profession the importance of offering to parents vaccination for every child between the ages of four months and two years. This if done every winter would keep good virus in reach of every one.

Furunculoid diseases were constantly appearing during the first half of the year. If cold applications did not stop the local disease in a few hours, blistering, with saleratus, tincture iodine, or early incisions, were most successful; if neglected, "tendon and phalanx" were the "sport of their fury."

Ague and remittent fever have been more common than since 1850, but not to the exclusion of other diseases. Rheumatism, neuralgia, pleuritis, pneumonia, catarrh, diarrhoea, and continued fever, in more than usual variety, occupied our attention. Diseases have not been severe, and

very few have been fatal. In January, 1854, a lady came here from White Pigeon, with varioloid; the course of the disease was mild. One other (her father) contracted varioloid from this, and was equally mild. A case of cholera appeared here June 9th, to wit: Two men from central N. Y. had traveled together, stopping a day or two at Buffalo and two or three days at Toledo, Ohio. One came here on the 7th, and the other stopped at Hudson, Mich. till the 9th, and arrived here at two P.M., without dinner;—ate a piece of lemon pie, of which he complained during the P.M. that it distressed him, but it did not prevent his walking about town.

There is evidence that he had diarrhœa in the evening, but he made no complaint of it until about 4 A.M. on the 10th, when he called upon his companion for aid, saying he had “been out” several times during the night vomiting, and purging severely each time. We saw him first at 6½ o’clock, A.M.: pulse about 90; feebly felt, about half-way up the forearm, by pressing away the *waxy* muscles; skin shriveled and inelastic, moist, cold, and of dark reddish-blue color.

Cramping was extremely severe. Had just vomited 1½ pints of cloudy looking serum. Tr. of opium and catechu, with chloroform, were administered, and repeated after vomiting, which occurred only once or twice. Calomel, 15 grs.; morphine, ¼ gr.; bi. carb. soda, 20 grs.; were given at 7 A.M. Cramps had nearly stopped at 8 o’clock, pain abated, and had slept a few moments. Awoke rational and clear,—sweats profusely. Administered quinine, capsicum, brandy, etc., internally; sinapisms and turpentine, externally. About 9 A.M. a slight evacuation. *R.*—Quinine, carb. ammonia, and hot coffee; 3 grs. calomel were given before 10 o’clock.

About noon two other evacuations occurred, and coma soon supervened. *R.*—Enema of solution of sach. saturni. was administered, and remedies similar to the last continued while practicable. Died at 2½ P.M.

The traveling companion complained of griping pain in the bowels on the morning of the 10th, for which he took fl. 3., 1 tr. opii. campb, and complained no more till the 14th, on the morning of which he commenced work, (carpenter) in hot sun. Diarrhœa began about midnight.—Being very sick at the stomach, he soon began vomiting, as he was obliged to walk about 60 rods after obtaining a prescription. He then went into the hands of the physician to the family, with whom he boarded and died after several days, with consecutive fever. Two citizens also

died with cholera. One, a man of good habits was taken with slight diarrhoea and placed himself under the hands of a hydropathist—failed rapidly, and died in a few hours—having been pronounced better within a few minutes, by his *swimming master*. The other citizen was a “sot-tish” bachelor who had suffered diarrhoea for several days without treatment; died about 11 o’clock A.M., June 24th, having passed the previous night alone; was found in collapse in the morning. All of these were about “middle aged men” of good physical developement. A number of other attacks occurred precisely similar in the commencement, but all were promptly attended by regular physicians, and were cured. Cases of cholera-morbus occurred about the same time, resembling those of cholera, except in the character of evacuations, and the “cyanosis,” when the stage of prostration came on. September 25th, Mr. J. R. came from Toledo, having had choleraic symptoms 3 or 4 days which he had tried in vain to check with homœopathic remedies. On the morning dated, he took a large dose of brandy and came here upon the cars.

The existing train of symptoms were relieved, or changed for those nearly resembling most epidemics of typhoid fever, which continued with scarcely a prospect of living for four weeks, but finally recovered. fever 1; tubercles of brain 1; croup simple 1; croup (diphtheritic) 2;

The community became healthy as usual, in November; catarrhs prevailed considerably in autumn, as usual.

The interments, 38 in number, have been, as near as could be ascertained, from the following causes: consumption 5; inflammation of the brain 2; diarrhoea 1; apoplexy 1; schirrus 1; typhoid fever 3; rheumatic typhoid pneumonia 2; cholera 4; accident 2. This includes the village of Coldwater and immediate vicinity. Population about 2500.

Spector mania has prevailed to some extent during the past year. Those effected seem to lose a portion of their powers of discrimination, and place credence in persons to whom they heretofore accorded no character, believing them actuated by supernatural agencies, or themselves perform the most ridiculous gyrations; mutter incoherent jargon, which they, or victims pretended to interpret, or write in some scrawling, unusual style, ambiguous sentences, which they pretend are indited by an “unseen ghost,” but which always bear the mental stamp of the performer.

Table tipping has sometimes added to the entertainment, but has not been carried to any degree of perfection. Neither reason nor ridicule

seem to open the eyes of the victims to the most shallow deception and glaring imposition. Listlessness and inattention to business are apparent in the victims, but complete mania has not occurred.

Dr. Waldo, of Tecousia, Calhoun Co., informs me that in the north part of this (Branch) county no epidemic has prevailed; sporadic dysentery, erysipelas, pertussis and rubeola simplex, have been extant, but generally mild. Neuralgia has been very common, seeming to be isomeric with intermittent fever, and amenable to the same treatment.

At Union City, and through the N. W. part of this county, epidemic dysentery, of severe grade, prevailed in July and August.

The infected district was about 15 miles from E. to W., and 9 from N. to S.—containing about 2000 inhabitants.

The soil is sandy loam mostly; country rolling, and possessing no peculiarity, except a large proportion of wells curbed with wood, and excessive drouth during the season. The drouth was not sufficient to injure vegetation materially.

232 cases have been reported; 31 terminated fatally.

The disease did not entirely subside till October, when the community became healthy. I have given a more particular account of this epidemic to the Chairman of Committee on Dysentery.

Of St. Joseph county, we have obtained but little account, concerning the early history of diseases. At Burr Oak, small-pox existed at the commencement of 1854. Probably 7 or 8 case, mostly "modified" occurred, and two or three proved fatal.

Sporadic cases of rubeola simplex, (in one house 3 cases occurred) cholera infantum and dysentery were seen during the year.*

The morality in the township had been very light. The section is miasmatic but not as decidedly so as much of this county.

We have no account of small-pox at Sturgis during 1854; in all other respects, the report for Burr Oak would nearly answer for this place. In January, 1854, White Pigeon was visited by small-pox. Six cases occurred and 3 proved fatal—one in a child $1\frac{1}{2}$ years old, by convulsions. Five or six cases of cholera occurred, mostly transient persons. One died from consecutive fever. Calomel, in small doses, was used, with camphor and narcotics to allay pain, etc. Erysipelas, rubeola and dysentery, were occasionally seen.

*In September several cases of typhoid fever occurred. DR. PARSONS.

Our informant (Dr. Elliott,) found mercurials, narcotics and astringents essential in the treatment of dysentery, in the order named.

Constantine contains a population of 1400. The soil is mostly sandy. The streams are not rapid, and generally have low banks.

Dr. Thorn thinks miasmatic affections were not as prevalent in the *earliest settlement* of the country, as after a few years. We think the reason is, in the fact that, as "burr-oak" or "openings" soil contains less vegetable matter than heavily timbered land, less effect was produced by the exposure of its surface to atmospheric vicissitudes—but when several adjoining farms were cleared, allowing currents of air to sweep directly from marshes, or sluggish streams, carrying their vapors around the domicils of the settlers, the value of the leafy barrier was shown by the irrevocable change.

In 1844 a severe and fatal epidemic scarlatina prevailed. A.D., 1849, appeared to present new, and more continued forms of fever, and intermittents have not been as common since.

THREE RIVERS.—The soil and face of the country here is similar to that last described. Drs. Egar and Choat had found more intermittent and remittent fevers to combat here, previous to 1851, than all other diseases together. In 1840, and again in 1849, in August and September, epidemic dysentery prevailed here, and at Gull Prairie, with unusual mortality among children and the aged.

In 1850 the same disease became endemic, in place of intermittent and remittent fevers; since that period it had occurred more frequently as a sporadic affection than formerly. The same is true of typhoid fevers. In 1844, erysipelas of severe grade prevailed extensively, but all, or nearly all the cases, recovered. In the winter of 1853 and '54, variola and varioloid occurred at Centreville, 7 miles distant, but no cases appeared here although very free communication was kept up. No cholera became clearly developed here during the past year, although choleraic tendencies were strongly exhibited. Fevers, in autumn, showed more than usual tendencies to relapses. The same was true of 1848.

In treatment of dysentery, Dr. E. found calomel indicated at first. If there was acidity of the stomach, calcined magnesia; if not, pulverized ipecac, rhei and camphor, were used to promote alvine evacuations occasionally, and generally relieved tenesmus. Gum acaciæ was also given freely. Enemata of starch, or thin mucilage, with sach. saturni and opium were beneficial. When alterative effect was produced, tannic acid and quinine encouraged convalescence.

A majority of wells, throughout this section, are curbed with wood, a part of which is often left in, when brick or stone walls are built. This gives the water an unnatural taste, which is very perceptible to persons unaccustomed to drink or use it. In dry seasons, when water is low, the temperature of the wells becomes high enough to favor the emanation of unhealthy gasses at the very spot where citizens are most liable to be injured by them. In many sections stone and brick are scarce, and masons have been scarce, so that cellars have been walled with plank, which rot out in 6 or 8 years, constantly emitting unhealthy exhalations. When these and a few other general improvements are wrought—as they soon will be if the present thrift of the inhabitants continue—we think Southern Michigan will compare most favorably with any fertile section in the temperate zone. Respectfully submitted, by

J. W. BEECH, M.D.

Commencing again at the eastern side of the State, we take the second tier of counties.

Wayne County is similar in the general face of the country to Monroe, but more densely populated. Most of the population is concentrated in and around Detroit. The water in country places supplied by shallow wells, but in Detroit it is drawn by machinery from Detroit river. The well water is very hard, and contains a considerable quantity of sulphate of magnesia; but the river water is soft and very pure.

The following report read by Dr. E. Christian before the Detroit Medical Society was forwarded to us at the order of that body.

Mr. President and Gentlemen of the Detroit Medical Society:

The Committee appointed by a resolution of this Society, passed December 13th, 1854, for the purpose of furnishing a report of the diseases prevalent in this vicinity, said report to be forwarded to the Committee of the State Medical Society at Ann Arbor, report as follows:

Although during the past year, disease in multiplied forms has prevailed in our city, and the physician on his mission of alleviation has had to bring into requisition the whole resources of his art to relieve those stricken with the pestilence; still the records are not sufficiently copious nor explicit, nor has there sufficient time been given to the Committee, to draw up such a detailed statement, as would even approximate towards answering the different queries propounded in the circular of the State Medical Society, to the physicians of the State. The Committee

in their circular say "that it is important the answers should be *sent in* by the 1st of January." The late period when this Committee was appointed and other unavoidable circumstances preventing, is our apology for the late compliance.

The questions proposed in the circular, refer principally to epidemics, some of them as follows:

1st. What epidemics have come under your observation during the years 1851, '52, '53, '54?

2d. When did they commence and how long did they continue?

3d. In what place did they prevail? and how widely were they extended; and so on?

Some of them we shall be able to answer by collating from the records of the Society, and others by referring to abler authorities, where accurate descriptions may be found and complete details of all the circumstances capable of throwing light on the subject.

We shall speak only of those epidemics and diseases coming under our observation since the beginning of the year 1854, or no further back than the fall of '53.

Commencing then with the month of December 1853, the reports of this month state that the prevailing form of fever was of a typhoid type, although intermittents occurred in several parts of the city. Again in January '54, the reports show besides the usual diseases of the winter months, Pneumonia, Rheumatism, Croup, &c., cases of Typhoid Fever, and state that the continued form of fever was most prevalent. In February, we quote from the records: "The statistics of disease as furnished by the reports of the members presented no peculiarities. The continued form of fever was most prevalent." From the last date to May 18, no reports of prevalent diseases are recorded; but in our own practice we find the same form of fever noticed as occurring more frequently than others.

For an accurate description of this epidemic, with some of the peculiar characteristics of which the generality of continued fevers were more or less distinctly impressed, varying in different individuals, localities and circumstances, but showing the influence of a common morbid element, we can do no better than refer to the history with details of cases, &c., by Doct. Pitcher, published in the *Peninsular Medical Journal*, Vol. 1, page 206.

Succeeding this we find the character of diseases gradually changing.

Instead of fevers being noted as most prevalent the transition is to ordinary diseases of the warmer months. Diarrhoeas and dysenterys become more numerous; and another morbid element manifests its influence even by modifying the prevailing diseases, before its unequivocal manifestation in the form of a distinct epidemic. In this manner does it foreshadow its irruption as early as the fore part of May, and at the meeting on the 18th of May, there is reported, by Doct. Batewell, a case of collapse after excessive vomiting, but without diarrhoea; also by Doct. Brodie, which it may be well to mention here, several cases of fever with enteritic symptoms. By the last week in May several cases of decided cholera had occurred in the upper part of the city, and at the meeting of June 15, most of the members report cases of the same. From this time it continued to prostrate its victims, until as late as October 5th, when several cases are still reported as occurring within the preceding week. We have here given only the chronology of the epidemic. For the complete history of all the facts and circumstances connected with it, we refer to No. 3, of Vol. 11, of the *Peninsular Medical Journal*, to the article entitled "The Cholera of 1854 in Detroit, by Z. Pitcher, M. D."

Returning to the early part of the season, preceding the prevalence of the typhoid type of fever during the Winter and Spring, and before the decided outbreak of the cholera, there are other varieties of fever manifested. At the meeting June 1st, Doct. Brodie reports a peculiar form of fever commencing as an intermittent, running into a continued form, and lasting about ten days, also reported by others, besides cases of Scarlatina, Acute Rheumatism, Varicella, and Dysentery and Diarrhoea, many cases of Remittent Fever. Fever cases were thought to be most numerous and the general amount of sickness greater than usual at the same period of the year. From this time cases of fever become less numerous disappearing almost entirely and indeed no reports are made of its existence, until October 5th, when, say the records "the statements of the different members showed an unusual prevalence of intermittents, and presenting various characteristics—in many cases a single chill succeeded by continued fever—often running into a typhoid type in some cases intermitting with dysentery." Doct. Inglis, in a paper read before this Society November 2, on the subject of fever, speaks particularly of this prevailing form, he says it is extensively prevalent not only in this city, but even to a greater extent in the country about, for several miles beyond the city limits.

He thinks it may be in some way connected with, or to some extent caused by the extensive fires which swept over the country a year ago last fall. The burning of the upper surface exposing new layers of decaying vegetable matter to the sun and atmosphere, and also leaving excavations which subsequently became pools of stagnant water. He notices particularly the common enteritic complications, and speaks, as do others, also, of extensive experience of the inefficacy of quinine in these cases. Doct. Stebbins, also, in remarks upon dysentery, has occasion to refer to prevalent gastric irritability, and resulting from it a difficulty in producing desired effects by remedies.

The next particularly noticeable peculiarity in the progress of diseases exhibits itself during this unusual prevalence of remittent and intermittent fever. At the next subsequent meeting is reported an unusual prevalence of jaundice; occurring not only during the course of continued fever with gastro-duodenal irritation, but also very commonly in intermittents, and even occurring idiopathically to a considerable extent.

Reverting now, we cannot fail to observe the common Gastro-enteritic complications noted as occurring throughout the fevers of the season, from those reported by Doct. Brodie in the latter part of May, when the Cholera first began to appear amongst us, down to those last spoken of in November (Query?) Is this also the impression of the cholera modifying the forms in this manner? Again, in regard to the jaundice of which we have above spoken—is this another modification arising from the operations of the same cause which produced the extensive prevalence of miasmatic fevers? And again, is this unusual amount of fever in any degree dependent upon a modification of the atmosphere or the constitution by the cholera predisposing for the influence of malaria?

In September last the Small Pox made its appearance, brought here by the emigrants; cases came under my observation almost simultaneously in two different parts of the city, but in both cases the infection was attributed, and traceable to German emigrants. From these two points (the one on Maccomb street, the other on Franklin) it slowly disseminated itself, until the setting in of cold weather, when it began to assume the form of an epidemic, although for a while confined exclusively to the most destitute class of citizens, and though breaking out in different parts of the city, yet in those alone occupied by this class. Lately it appears to have overleaped this barrier and to have sought its victims amongst those in comfortable circumstances.

We have met with it in all its forms, from the Variola Discretar with few and scattered points through all gradations to the most disgusting forms of variola confluens. One case novel to myself, though I believe not unusual, the eruption was confined entirely to the face, the other parts of the body being wholly unaffected. In this case the disease ran a very mild course with but little symptomatic fever.

As is usual when the disease becomes epidemic, many cases of considerable severity have occurred in adults vaccinated in infancy. Those appearing to be most liable to the contagion who have passed through much sickness, and likewise such have been found the most apt subjects for revaccination.

Some peculiarities are reported in its manifestations. Doct. Brodie reports as occurring a case of small pox complicated with erysipelas, * and also a case complicated with scarlatina. Doct. Watson speaks of the liability of patients with severe forms of the confluent small pox, to troublesome erysipelatous swellings, and also in the innoculated form says that the eruption is sometimes preceded by a rash something like that of scarlet fever, and called, by Willan, the Rubeola Variolosa.

We have now spoken of all the diseases which have in any degree assumed the form of an epidemic during the past year, and it remains to speak of the ordinary diseases not epidemic.

Of these the following are most commonly reported. Those most frequently reported being first in order. Croup, inflammatory and spasmodic, Dysentery, Diarrhoea, Rheumatism, Pneumonia, Scarlatina, Varicella, Neuralgia, Erysipelas, Menorrhagia, Asthenia, Phthisis, Pulmonalis, Pleurisy.

What we have above written affords but a meagre report, and our termination is necessarily abrupt, want of time preventing a farther extension.

E. P. CHRISTIAN, M. D. }
MORSE STEWART, M. D. } Committee.

In the October number of the present volume of the Peninsular Journal may be found an account by Prof. Pitcher of the visitation of the cholera in Detroit last summer. To that document we refer the Society for particulars.

It appears that the coming of the cholera was foreshadowed at first by

* Since the foregoing was written, Doct. Pitcher states that several cases have since occurred at St. Mary's Hospital, of small pox complicated with erysipelas.

an asthenic type in other diseases, and later by cases of fever. The number of interments in the cemeteries during the three summer months was 1447, of which about one thousand were cases which died of cholera. This gives an average during three months of about ten or twelve deaths by cholera per day.

The disease in some cases showed an approximation to yellow fever, a decided black vomit being thrown up. There were not as many cases of malignant erysipelas and dysentery as in previous visitations.

The Physicians of Detroit adopted various forms of treatment mostly based, however, on similar principles, and generally resulting in a very satisfactory degree of success.

In St. Mary's Hospital, the following plan was adopted. The first step was to administer a stimulating emetic composed of chloride of sodium, and an infusion of black pepper; after this, ten or twenty grains of calomel was given, followed by drachm doses of the following mixture once in fifteen minutes or more, as may be required.

R̄ Syrup Rhei Arom, ℥j.

Acet. Ammonii. (liquid,) ℥j.

Opiated Tinct. Camph. ℥i.

M.

This was accomplished with whatever brandy, hot drinks, frictions, sinapisms, &c., as the case required. Under this treatment it was found by computation, that a larger per centage of patients were saved than in the insane hospital, in previous years before this treatment was adopted. A very gratifying number were rescued even in the blue stage. A meteorological table, kept by Rev. Geo. Duffield, shows that the prevalence of the cholera, had an obvious relation to the amount of rain that fell as well as to the temperature.

In the western part of Wayne County, in the township of Wayne, a local pestilence of small-pox occurred, during the present winter. We are not informed of all the particulars. It was a country neighborhood some three miles from the railroad station. The first case was that of a person who came there from the village of Plymouth. The nature of the disease was not recognized at first, and as the neighbors ran in and out freely, many of them took it. We understand that about thirty cases occurred, but with little or no mortality. It is said, also, that there were cases of the same disease in the township of Dearborn.

The next county west of Wayne is Washtenaw. The face of the

country is quite rolling, and pretty thickly and uniformly settled. It contains the villages of Ypsilanti, Ann Arbor, Dexter, Saline, Chelsea, and Manchester. The forests were originally, for the most part oak, but there are no large tracts of wild land left unsettled at the present time. In former years intermittent fevers were prevalent, but in the older parts they have almost entirely disappeared, and other malarious diseases have diminished, so that at the present time, although the increase of population has necessarily rendered the actual mortality greater, yet the per centage of mortality is visibly less than in the years of its early settlement. The following report from Dr. Geo. Pray, gives an account of the diseases in the northern part of the county.

Prof. Sager:

SIR:—Through the Peninsula Medical Journal, I have received a circular in regard to epidemic. Without pretending to answer the inquiries therein contained, in their order, and without expecting to communicate any thing of much importance or interest, I will sketch an outline history of diseases as they have occurred in their section, of which you may make such use as you think proper.

My ride embraces the township of Saline, and the east half of the township of Northfield. The most of it was originally covered with heavy timber—is rather low, the soil is mostly clay with now and then sandy portions. The whole abounds in catholes, swamps and marshes, in which there is usually standing water, and much decayed vegetable matter. It is now well settled and cleared up to a considerable extent. But in many instances the catholes and marshes have been badly neglected—being uncleared and undrained. The catholes have often served as receptacles for the timber, formerly standing around them—which has been felled into them and left to decay in the stagnant water. This is therefore a region particularly favorable to the generation of marsh miasm. Until within the last three dry seasons, intermittent and remittent fevers have prevailed exclusively, constituting a greater part of the sickness in the summer and autumnal months.

I have been practicing in this neighborhood about six years. When I commenced, the then prevailing epidemic, commonly called “brain fever,” had been committing some ravages. It seemed to be as observed there, a cerebro spinal meningitis, which was modified to a considerable

extent by marsh miasm—since it seemed at first to put on a periodical type, and other cases having many of its characteristics, and evidently periodical prevailed at the same time. You are aware, that by some it was considered to be suppressed erysipelas, affecting the nervous system. It may be well to remark, that during the previous winters, 1846–7, erysipelas prevailed to a fearful extent in the same neighborhood in which the brain fever was the worst. The brain fever was generally fatal.

From this time, until the winter of 1850–1, no disease prevailed to any considerable extent, except marsh fevers—which during the summer and autumnal months, prevailed as usual quite generally, almost every family in some neighborhoods having more or less of it.

About the 1st of January, 1851, erysipelas again showed itself. A young lady who had for a time, been residing in Ann Arbor, came home sick with erysipelas. Others of her family were soon seized, and from that centre it seemed to spread, until it prevailed to a considerable extent, over quite a space around. It was evidently contagious, being, in many instances, conveyed by hired girls and others, quite a distance into healthy districts, thus making new centres of contagion. And all cases before it prevailed so generally, could be traced back to the first one.—When one in a family became affected, all, generally suffered to some extent. It prevailed over a region of about 4 or 5 miles quite generally—a majority of the inhabitants having been affected with at least some of the symptoms of the disease. It varied greatly in form and severity, in different cases—some being of a very severe character—others very mild. In the great number of cases, the throat alone was affected. This form, almost none escaped, although it varied greatly in severity, some being so lightly affected as not to mind it much. The throat became suddenly sore, and great difficulty of deglutition almost immediately followed. In some cases the pain was so sharp, and severe on attempting to swallow, as to put the patient in great agony. The pain usually extended from the throat to the ears. The neck would soon become swelled—the glands hard and very sore, and the jaw stiff. On examining the mouth the fauces were found to be affected with a diffusive inflammation—the soft palate, velum and tonsils, being much enlarged, and all of a deep red color, sometimes white patches being interspersed, which resembled aloes, but could be easily removed. The throat was filled with very thick tenacious soapy mucus, which, by accumulating, distressed the patient very much by impeding respiration—by causing the act of deglutition—by nauseating

and by the constant effort which it called forth to expel it. Deglutition, was in some cases impossible, even cold water being forcibly ejected through the nostrils and mouth, and in all cases it was difficult. The larynx was not effected in any cases which I saw, but the epiglottis was probably enlarged and did not protect the glottis from the intrusion of fluids in swallowing, which caused their sudden ejection. The respiration was not otherwise affected than from the swelling and mucus. Some could not breathe in a recumbent position, and sleep was usually prevented. The breath was very offensive and the tongue thickly loaded with yellowish fur. This form usually terminated in resolution in the course of six or eight days, suppuration seldom taking place. The most effectual remedies were free scarification, and blistering of the sides and back of the neck.

Some were effected with inflammation of the schneiderian membrane, the frontal sinus &c., being affected. In these cases the nose, eyes and forehead were very sore and painful, one side being usually more affected than the other. There was usually, fever, headache, and weakness, with a disagreeable sense of stuffing in one of the nostrils, which was extremely sore. At length suppuration took place, and the disease declined with a great discharge of foetid matter.

Some were affected with erysipelas of the face and scalp, in some instances following after the erysipelas of the throat and nostrils, the disease seeming to emerge from the lachrymal duct, ears and nostrils. Others were affected with erysipelas of the extremities. In some cases the disease simulated rheumatism very closely at first, the wrist and ankle joints, for instance, being affected with slight swelling and only a blush of redness, but other characteristics as sore throat &c., betraying its character.

Quite a number of cases occurred in which the disease manifested itself in the axillary glands. The patient was seized with a severe pain in the axilla with fever, headache, &c. At length swelling and great soreness followed, and erysipelas showed itself externally, and sometimes spread over the whole side and was usually followed by extensive suppuration.

The disease continued to rage until steady warm weather came on. The number of cases which I attended was, as near as I can estimate, between fifty, sixty and seventy. Of these, five died. One was a case following severe pneumonia; one was a case in which abortion took place, with great loss of blood and a metastasis of the disease, from the extremities to the pleura; two of old persons, in which the axillary glands were first affected.

ted—one dying in forty-eight hours after being attacked, the disease extending to the pleura; the other, after very extensive suppuration had taken place; and one in childbed. Other cases came under the care of other physicians, and many mild cases occurred which required no other than domestic remedies.

The disease abated as warm weather came on, or rather merged, if such a thing ever takes place, into a mild form of scarlatina. It was difficult to tell when erysipelas left off, and scarlatina commenced, for while now and then a case of sore throat, which was supposed to be erysipelatous, still occurred, scarlatina broke out among children, and it was impossible to decide to which disease to refer those cases of angina which often affected adults in families where scarlatina prevailed, there being no distinction between them and those which we so often saw during the prevalence of erysipelas, except that in no case did erysipelas affect the skin. This scarlatina prevailed to a considerable extent in some neighborhoods, but was quite mild, no deaths following, except in one instance, which was caused by neglecting the dropsy which very generally followed it. It continued until in the fall, the marsh fevers in the mean time, prevailing as usual, when it seemed to merge back again into erysipelas, the first case of which occurred on the 27th of Jan. 1852, and from that time it spread rapidly and extensively. Its location at this time was east of, but adjoining its former ravages. As before, it spread over a space of 4 or 5 miles square, almost every one feeling its influence to some extent, in the way of sore throat, coryza, &c.,—one family, perhaps, exhibiting in its different members, all varieties, from the mildest to the most aggravated. The various forms enumerated before, presented themselves, and in addition another more aggravated form, which I did not see the year before.—The patients were seized with the usual premonitory symptoms, had some soreness of the throat, headache, languor, pains in the joints, which were slightly swelled and somewhat red. A metastasis, soon apparently took place, and a degree of uneasiness was felt in the stomach and bowels, which soon increased to very severe pain, the abdomen becoming tympanitic, and very sore. There was sickness of the stomach, diarrhoea, and an almost constant eructation, which seemed to distress the sufferers very much.—The pulse was frequent, respiration painful, patients parts of the time delirious, extremities cold, and everything indicating great anxiety distress and depression—At length a cold clammy sweat broke out with prostration, and death soon followed preceded by vomiting of a dark matter re-

sembling coffee grounds. Of four cases thus seized, one died in 24, one in 48, one in 72 hours, and one survived nearly two weeks, the soreness and tympanitis yielding at the same time that the lungs became implicated. There was cough, with expectoration of thick greenish, almost black sputa at first, and at length, shortly before death, with a very profuse expectoration of thin yellow matter, almost like the beaten yolk of eggs. This was also attended with diarrhoea and great prostration.—These four were all strong healthy young persons. Two others attacked similarly, although much more mildly, after struggling for a long time, finally recovered. Three puerperal cases occurred about the same time, which were attended with the same symptoms of those last enumerated, all of which speedily terminated in death. In two of these, erysipelas manifested itself externally also. During the winter and spring, I attended 54 cases. Of these 8 died, 4 as above stated, 3 in child bed, and one in which the disease commenced in the axilla, and was followed by extensive suppuration. The disease continued until in May, abating as the warm weather came on, except occasionally a case of angina showed itself. In the latter part of July following, scarlatina manifested itself again, following in the footsteps of its predecessor as before—adults having severe angina, and children the disease in its usual form. It continued to rage to a greater or less extent, from this time until in May 1853, when it disappeared for the time. It spread to a much greater extent than it did before, and far beyond the limits of my side—in Plymouth to east, and Lyon to the north, and I know no how much further. It prevailed quite generally over my side, a majority of all classes and ages being affected with angina. It was not of a very severe form, there being but few deaths in comparison to the whole number affected, and these mostly of infants.—A majority of cases were so mild as to require no treatment. A nausea was a very common and troublesome. No deaths resulting from this cause.

(To be Continued.)

ART. II.—Abstract of Meteorological Observations made at the University of Michigan during the month of February, 1855. By A. Winchell, A.M., Professor of Physics and Civil Engineering.

(For standing Explanatory Notes, see this Journal, February, 1855.)

TABLE I. CLOUDS AND WINDS.

Direction.	CLOUDS.								WINDS.							
	7 A. M.		2 P. M.		9 P. M.		Resultant.		7 A. M.		2 P. M.		9 P. M.		Resultant.	
	No obs.	Mean Veloc.	No obs.	Mean Veloc.	No obs.	Mean Veloc.	Total obs.	Mean Veloc.	No obs.	Mean Force.	No obs.	Mean Force.	No obs.	Mean Force.	Total obs.	Mean Force
N.	2	2.50	3	2.00	1	3.00	6	2.33	1	3.00	2	2.00	1	3.00	4	2.50
N.E.	1	3.00	0		0		1	3.00	1	2.00	2	2.50	1	4.00	4	2.75
E.	1	2.00	0		0		1	2.00	3	2.00	0	2.67	2	1.50	5	1.80
S.E.	0		1	3.00	1	1.00	2	2.00	1	3.00	3	2.67	2	2.00	6	2.50
S.	0		0		0		0		0		0		0		0	
S.W.	3	2.33	3	2.33	3	2.00	9	2.22	6	2.33	7	2.29	6	2.08	19	2.24
W.	10	1.90	11	2.18	10	1.80	31	1.90	3	2.00	4	3.00	6	2.83	13	2.69
N.W.	10	2.00	8	2.50	7	1.86	25	2.12	11	1.86	10	2.40	6	1.67	27	2.00
0	1		2		6		9		2		0		4		6	
Monthly Mean.	28	2.07	28	2.31	28	1.86	84	2.09	28	1.94	28	2.46	28	1.91	84	2.10

TABLE II. STORMS.

CYCLONE.						PRECIPITATION.		
No.	Com-mence-ment.	Duration.	Fall of Barom-eter.	Fall below Mean	Minim attained.	Date of Minim.	Dura-tion.	Amount.
		hours	inches.	inches.	inches.		hrs.	in.
1	Feb. 1	96	.581	.361	28.686	Feb. 2, 9 p.m.	2	.134
2	6	72	.323	.350	28.697	7, 2 p.m.	12	.346
3	10	24	.273	.165	28.882	10, 9 p.m.	3	.050
4	11	72	.428	.410	28.637	13, 9 p.m.	24	1.157
5	20	48	.306	.094	29.141	22, 7 a.m.	19	.193
6	24	65	.378	.110	28.937	26, 2 p.m.	0	Trifling.
		377					60	1.880

ART. III.—*Abstract of Meteorological Observations made at the University of Michigan during the month of March, 1855. By A. Winchel, Professor of Physics and Civil Engineering.*

(For standing Explanatory Notes, see this Journal, Vol. II., No. 8.)

TABLE I. CLOUDS AND WINDS.

CLOUDS.							WINDS.									
Direction.	7 A.M.		2 P.M.		9 P.M.		Resultant.	7 A.M.	2 P.M.		9 P.M.		Resultant.			
	No. obs.	Mean Veloc.	No. obs.	Mean Veloc.	No. obs.	Mean Veloc.			Total obs.	Mean Veloc.	No. obs.	Mean Force.		No. obs.	Mean Force.	Total obs.
N.	0		0		0	1.00	0	2	2.50	1	1.00	0	3	2.00		
N.E.	0		0		1	1.00	1	1.00	1	3.00	3	2.33	2	2.00	6	2.33
E.	1	3.00	1	3.00	1	3.00	3	3.00	0	0	0	3	2.33	3	2.33	
S.E.	3	2.33	1	3.00	1	3.00	5	2.60	5	2.60	3	2.67	1	3.00	9	2.67
S.	0		1	2.00	0		1	2.00	4	1.75	2	1.00	3	2.67	9	1.89
S.W.	10	1.40	8	1.87	5	1.20	23	1.52	6	2.50	6	4.00	3	2.00	15	3.00
W.	6	2.67	11	2.82	6	2.67	23	2.74	8	2.87	13	3.46	10	3.40	31	3.29
N.W.	5	3.40	6	2.67	3	3.33	14	3.07	5	3.20	3	3.67	3	4.00	11	3.54
0	6		3		14		23		0	0	0	6		6		
Monthly Mean.	31	2.28	31	2.41	31	2.29	93	2.37	31	2.65	31	3.16	31	2.39	93	2.73

TABLE II. STORMS.

CYCLONE.							PRECIPITATION.		
No.	Com-mence-ment.	Dura-tion.	Fall of Barom-eter.	Fall below Mean.	Minim attain-ed.	Date of Minim.	Dura-tion.	Am't.	Character.
		hrs.	in.	in.	in.		hrs.	in.	
1	Mar. 2	31	.428	.026	29.064	3d, 7 A.M.		.0406	Snow
2	4	48	.677	.529	28.509	5th, 2 P.M.		.0000	Fog, wind
3	6	24	.064	.194	28.844	7th, 2 P.M.		.0000	
4	8	24	.396	.314	28.724	8th, 9 P.M.	3	.1606	Sleet, snow
5	10	31	.594	.291	28.747	11th, 2 P.M.	5	.3938	Rain hail, snow
6	12	72	.717	.723	28.315	13th, 2 P.M.	14	1.3573	Ice, snow, rain, snow
7	16	24	.566	.486	28.552	17th, 7 A.M.	4	.0797	Hail, snow
8	19	14	.422	.300	28.738	19th, 2 P.M.	1	.0167	Snow
9	23	24	.990	.643	28.395	23rd, 2 P.M.	2	.0850	Snow
10	25	38	.538	.576	28.462	26th, 2 P.M.	26	.0484	Snow
		330					55	2.1821	

EDITORIAL.

The Scalpel on the University of Michigan.

In our last number we referred to the manner in which some of our cotemporaries had noticed the absurd affair of the "Homœopathic Act" in relation to the University. From the time of the passage of this Act,

concocted by the enemies of the Medical Department, and supported by some of its professed friends, we have expected that it would subject us to annoyances from misstatements in the public prints and misconceptions on the part of the profession, and that it would require constant efforts to disabuse the minds of Medical men and Medical students throughout the country, upon whose favorable opinions the very existence of a Medical School depends, of the wrong statements and impressions that would almost inevitably get abroad through the carelessness of some presses and the base misrepresentations of others, and in all this our expectations have been realized. It seems an impression has gone abroad, that a chair of *Homœopathy is established* in the University, and some even seem to suppose that such a professor is appointed! That such statements from the occasion which has been given, should obtain currency in some of the common newspapers, which are always ready to pick up every thing out of the common way, to make readable "items," is by no means so strange; but that a periodical professing to be any sort of a Medical Journal, and which receives in exchange, the periodical which might be supposed to be informed on the subject, should presume to speak on the affairs of the University, without seeking for correct information, or having obtained it, should make false and slanderous statements, is more than we had anticipated. Such, however, is the fact, and whether it be from ignorance, when the proper source of information was readily accessible, or through knowing falsehood, the effect is the same. So far as the party injured is concerned, and the character of the offence is merely the same as relates to the guilty party.

We refer now to a statement made in the April number of the "*Scalpel*" a sort of half medical and half popular periodical, edited, as is well known, by a peculiar and excentric man noted for a sort of sparkling ability as a writer, for his disregard of many of the rules of professional etiquette, and for his general, if not indiscriminate attacks in an utter "filibustering" spirit, upon almost everything established and orthodox, either in medicine or religion, and especially is he noted for his caustic attacks upon medical men, holding high positions in the profession, and for his severity upon the clergy.

He intimates, on the title page of the "*Scalpel*," that he is set to "guard the Shepherds" of the profession, which means as interpreted by his acts, that he applies the lash to them, while public and professional

confidence sustains them in their positions, and tries to soothe them with most flattering unction, when that confidence is forfeited.

The following extracts from the statements referred to, respecting the University of Michigan, will illustrate the spirit of the editor of the *Scalpel*, and give a specimen, we should hope, for the sake of charity, an unusual one, as to its reliableness in matters of fact.

* * * * *

"J. Adams Allen, has been removed from his chair in the Michigan University. We are not surprised at this, as we see the names of several clergymen appended to the board of visitors. They have appointed a professor of Homœopathy! It is a Homœopathic concern no doubt, and no place for such a man as J. Adams Allen. Why do they not have a professor of Astrology? Roback is ready for them at any time." * *

When will our people learn that the intellectual infusoria that are spawned from colleges and churches, like the slime from the muddy Nile, are not fit to control the education of youth?

The article then represents Dr. Allen, as having *resigned*, and closes with a strong expression of its author's disapproval of all connected with the University.

Our readers, we hope will bear with us, while we examine briefly these remarkable passages.

The first statement respecting Dr. A's. removal is true, though old, it having occurred a year ago. As to the editors not being surprised at his removal, that was doubtless true, at the time it was written, as he long ago knew and recorded the fact; but the reason given for his not being thus surprised, viz, "that there are the names of several clergymen appended to the board of visitor," is *false*, as there is but *one* such clerical name on the board, and that board has no more to do with the dismissal or appointment of professors, than has this voracious editor himself.

The Board of Regents have the exclusive power of dismissing and appointing professors, and when this act of dismissal was done, there was not a single clergyman among their number. Since that time, one clergyman has been elected by the people of his district, to fill a vacancy which occurred in the board, in consequence of one of the Regents becoming Governor of the State, and he is a man of sound sense and correct principles, desirous of preserving the peace, harmony and honor of the University, and doubtless, therefore, would have stood by the other Regents in the action referred to, and now stands with them in declining to con-

summate any act of folly calculated to injure or disgrace the Institution over which they exercise control.

The next statement of the *Scalpel*, that a professor of Homœopathy is appointed, is entirely untrue. This statement, issued in the April number of the *Scalpel*, when the March number of the Peninsular Journal was on the editor's table, showing the facts of the case, whether the editor had examined it, or neglected to do so, and yet made grave and disparaging assertions respecting the school with which its editors are associated, as it is calculated to do the medical Department of the University much harm, with the profession, and interfere with its prospects, can be regarded only in the light of a foul slander, until it is fully retracted and the retraction is made as broad as the assertion. Our readers already understand the facts in the case, and it is unnecessary to repeat them.

If by the next declaration, that the University is "a Homœopathic concern," the editor of the *Scalpel* means to assert that there is a single believer of Homœopathy on the Board of Regents, or in the Medical Faculty, or indeed in any of the faculties of the University; in this, another false statement is made, for there is no such man connected with the Institution, and if he means to derisively insinuate, that the University of Michigan in any of its departments, is a small affair, the insinuation is equally false, besides being more meanly malicious.

To crown his blundering mis-statements, he speaks of Dr. Adam's, meaning Allen's "resignation." Dr. A. did not resign, but was removed as the article first stated, and as the editor knew, by the vote of the Board of Regents.

Dr. Dixon says he despises those associated with the University of Michigan. The expression of contempt of some men, is better than their praise, while the approval of others is most grateful, and after the acquaintance we have now had with this man of the *Scalpel*, it will not be difficult to determine to which of those classes to assign him.

We had intended to reply to the attack of another Journal—a neighbor of the *Scalpel*'s, in location and sympathy; but we are assured that attacks from that quarter will be construed by honorable men, as a compliment than a reproach, and have concluded to let it pass unnoticed.

Principles of comparative Physiology. By WM. B. CARPENTER, M.D., F. R. S., F. G. S. &c.

This work is issued by Blanchard and Lea of Philadelphia, from the fourth London edition, and is illustrated by three hundred and nine wood engravings. It contains 750 pages.

Like human physiology this work necessarily involves a large part of anatomy, and a consideration of the subject of homology and unity of organization.

Chapter first contains in a small space a full outline of all the most splendid philosophical theories on the subject of structure and function as well as a complete view in brief of the anatomy of all the animal and vegetable kingdom, both existing and fossil; the whole abundantly illustrated with engravings. This occupies about one hundred and thirty pages, and would be a valuable work published by itself.

Having thus laid down the foundation, the author proceeds to the physiology proper, dividing his subject by functions, and under each one detailing the apparatus and its action in the various classes of animals and vegetables.

Carpenter is not an original man—he does not astonish one by new and startling views, or splendid discoveries of his own. If he did his works considered as text books would have less merit. An original discoverer and thinker is occupied in bringing out his own thoughts and discoveries with the greatest possible brilliancy and power. He has facts to state and to prove, and theories to propound and defend—he is committed to maintain these things before the world, and obliged to spend his energy in procuring their recognition and establishment as a part of science. Hence original men are the best writers of monographs, and the worst compilers of text books. They are specialists and do not know how to sit in judgment on a whole science, and calmly set forth both their own and others' discoveries without partiality, and without disproportion. This work Carpenter does. He compiles, digests and condenses,—he trims, squares and fits together, and finally, without having been a great discoverer himself, he builds a splendid and consistent treatise which contains everything of importance which has ever been brought to light by himself or anybody else. Of course there are many things wanting in the treatise, because there are many fields in the organic kingdom unexplored, but what is known is most happily condensed.

It is impossible to make a second condensation so as to give the reader a brief view of the work, nor to discuss all the points which may be doubtful. That must be left to the reader.

We close with an extract showing his idea of the existence of mind in the various classes of being:

“Ascending from the articulated through the vertebrated series we ob-

serve a gradually increasing development of the reasoning powers, or the intelligence, and a gradual fading away of the instincts which become subordinate to the higher psychical faculties. A comparison between the habits of birds and insects will put this in a striking light. Several points of structural and physiological correspondence exist between these two classes, indicating that they hold a corresponding rank in their respective sub-kingdoms. But whilst nearly all the actions of insects appear to be under the guidance of pure unvarying instinct, those of birds whilst evidently prompted by *similar impulses* are yet capable of great modification in each individual by the influence of its reasoning faculties. Yet even in animals which possess a certain capability of determinately adapting means to ends by the operation of real intelligence, and which present, moreover, some approach to the *moral* nature of man, the psychical nature still wants that completeness which shall make them truly independent agents; for they seem not to enjoy the power of determining their course of thought and action by an effort of the will, which is the characteristic attribute of man, but to be entirely under the dominion of whatever ideas or passions may for the time possess their minds.

When we come, however, to man, we find the pure instincts brought under such subordination to the higher physical nature, and this placed so completely under the control of the will that it is only when the latter is still dormant or undeveloped, as is the case in infancy or idiocy, or when the balance is destroyed by disease, as in insanity, that the unrestrained operation of the automatic tendencies is witnessed. It is easy to perceive the final cause for this change.

If the organization of the human system had been adapted to perform all the actions necessary for the continued maintainance of his existence, with the same certainty and freedom from voluntary effort, as we perceive, where pure instinct is the governing principle—and if all his sensations had given rise to intuitive perceptions, instead of those preceptions being acquired by the exercise of his mind—it is evident that external circumstances would have created no stimulus to the improvement of his intellectual powers, and that the strength of his instinctive propensities would have diminished the freedom of his moral agency. Although therefore, to all the actions *immediately* necessary for the maintainance of his own existence, and for the continuance of his race, a powerful instinct strongly impels him, these propensities could not be gratified, if the means were not provided, by the exercise of those mental powers, which

he enjoys in a degree far exceeding those of any other terrestrial being. Hence we should be led to regard his place in the animal kingdom as being not at its head or in its center, but at the extreme most remote from its point of contact with the kingdom of organic life; in fact at the point at which we may believe it to touch another kingdom, that of *pure intelligence*."

We do not know that Carpenter has ever enjoyed the reputation of being particularly profound, but yet we have seldom seen two paragraphs so easy, calm and clear, and yet so suggestive of thought on a dark subject as the above.

First he recognizes mind. * Mind in man, and mind away down along the ranks of brute being to where the insect sports and dances. What wretched shifts have learned men made to avoid or fog over this conclusion which our author calmly and clearly states without hesitation and without astonishment.

Another important truth gliding from his pen in the same sentence is that instinctive acts in the insect is produced by *the same impulses as similar acts in man*, the only difference being that the instinctive impulses of man are restrained, guided, or urged on, as necessity may require, by the all-dominating energy of a more powerful will and reason. If this truth had been borne in mind by other writers, what awful contortions of argument, and stupid tangled meshes of sophistry the world would have been spared from writers who never once suspected that instinct was an attribute of mind, and that no man can take the first successful step towards explaining that or any other psychological function in the mind of lower animals, until it is well analyzed in our own.

Finally, it is interesting to the gradual extinction of mind as we go downward towards those animals whose final purpose is solely in physical uses, to see how gently the penumbra of thought shades away below us. It is as though the shadow of another world fell upon us.

Instinct is an attribute of mind, but it is an attribute which implies the constant presence of the external world for its usefulness. It is a correlated faculty which depends entirely on material objects for its field of action; hence as we come upward again in the scale of being, we find instinct diminishing as reason increases, until in man, who lives on the confines of another existence, who is to cut loose from these external objects, we find the abstract powers rising in their full sublimity, and the instincts diminishing to feeble and subordinate impulses.

The principal forms of the Skeleton and the Teeth. By Prof. R. OWEN, F. R. S., &c. Published by Blanchard & Lea, 1854.

This work originally appeared in London as an article specially prepared for a certain series of documents called "*Orr's Circle of the Sciences.*" Its rare merit and the renown of its distinguished author has caused it to be published in this country, in the independent form now presented. In brief we may state it to be a compact treatise on the Comparative Anatomy of the bones and teeth, and being a small work, and at the same time prepared by the most distinguished Osteologist in the world, it ought to command a wide sale among all who purpose to be intelligent in scientific matters. We know of no work where so much knowledge on this subject is so conveniently condensed. It is illustrated by three hundred and twelve wood engravings, which though not of so much beauty as those in Carpenter's Comparative Physiology, are still clear and sufficient.

Those who have not paid attention to Comparative Anatomy may be glad of a brief outline of the mode in which the subject is treated.

The study of the innumerable variety of animal skeletons has not resulted in a mere catalogue of bones; but through all these countless multitudes of form, there reign two great laws or principles, according to which all skeletons are arranged; some parts of them conforming more obviously to one of them and others to the other. The first of these principles is that of *purpose in organization*, or in other words, it is the general fact that every bone has such a form, size, and position as best fits it to subserve the uses which it is intended the animal shall make of it.

In other words, there is a design evident, and the skeleton of every animal is precisely like a machine, where each part is made with reference to a particular action and use. It is according to this principle that the humerus of a bird is hollow and filled with air, that of a bat is long and slender, and that of a mole is short and of great strength.

The second principle is that in addition to the adaptation to use, there is a certain degree of resemblance in all vertebrate skeletons—a certain uniformity of plan in them all, as if there had been in the mind of the Creator one general plan or outline of vertebrate animal, and all particular species had been formed on that plan, merely varying the form and development of the component parts to fit them to their varying purposes, but not changing the parts themselves. Thus if the animal is to fly, an en-

tirely original organ is not given for the purpose, but the anterior extremity is modified into a wing, still retaining the same bones as if it were a leg or an arm. So where the thorax of the bird is to be rendered inflexible, we do not have a new and unusual bone introduced into the spinal column, but simply an anchylosis of the dorsal vertebrae; and if the elephant requires a large pair of tusks for his use, we do not have them made on an original plan, but we simply have an enormous developement of the superior incisor teeth. And so on throughout the vertebrata. There is comparatively little that is unique in their nature, although there is very much that is strange in form. Most of the peculiar organs of animals are the same organs as those of other animals, and made on the same general plan, only modified in their form and size. In consequence of this fact it is possible to conceive of a general plan or outline of which all vertebrata are as it were modifications. This plan conceived in the mind is called the *archetype*. And the principle involved is called the *law of the Archetype* or the *law of unity in organization*.

This law is of the utmost importance to the study of Comparative Anatomy, because it simplifies the nomenclature. Having once mastered the archetype and named its bones, the same name will apply to the same bone throughout the vertebrate animals however various the form. If we were obliged to give a different name to every different form of each bone, human memory would break down under the enormous load of technical terms; in fact the study of Comparative Anatomy would be impossible; but when we learn to recognize a bone as the same through all its modifications we are able everywhere to give it the same name. Thus a humerus is always called a humerus, whether it is found in the arm of a man, the wing of a bird, the shovel of a mole, or the fin of a whale, and that too, though the humerus of a mole no more resembles that of a man than a tibia does a knee pan. This is one of the most splendid generalizations of science, and one which renders the study of Comparative Anatomy as easy as any other pursuit.

The author proceeds to specify the parts of the skeleton more particularly influenced by each of these two laws. Thus we have bones formed in the skin as in the bony armor of the armadillo. This is the *dermo-skeleton*. Then we have bones formed from the ossification of tendons as in the leg of the turkey, and the small bones of fishes. These constitute the *sclero-skeleton*. Then we have a set of bones either designed to protect the nervous centres, or else closely connected to such as

are thus designed. Such is the human skeleton, and it is named the *neuro-skeleton*. Now the bones of the dermo-skeleton, and the sclero-skeleton are very variable, and are not readily referrable to any archetype or plan. The dermal bones of one species do not correspond to those of another, but seem to be constructed almost entirely with reference to the law of final causes, or of adaptation to their designed end, while in the neuro-skeleton we see harmoniously in operation, both the law of design and the law of archetypes. The author goes on to develop the archetypal skeleton and to assign the proper names to each bone. In this part of the work he shows that the skull itself is a series of four modified vertebrae, protecting the four grand divisions of the brain. It was Oken who first suggested this idea. As he was walking one day in a forest he picked up the narrow, slender skull of a deer, and looking at its shape and outline exclaimed with a sudden burst of enthusiasm "this is a vertebra!" Strange as the assertion was, it has since become an admitted truth, though we now subdivide the skull, and make it four vertebrae instead of one.

After giving the details of the Archetype, Owen goes on to the description and comparison of animals according to it. He begins with the fishes, and ascends through the reptiles, birds and mammalians to man. He closes the work with an extended treatise on the teeth.

We close with a quotation in which he gives an opinion respecting the infidel theory of development which has of late years been resuscitated and dressed up, to procure, if possible, a second run in the world. After referring to some arguments used to prove that all animals are derived by development from a common ancestry, he says:

"Some have concluded therefore that the characters of a species become modified in successive generations, and that it was transmuted into a higher species; a reptile for instance into a mammal; an ape into a negro."

Let us consider therefore the import and value of the osteological differences between the gorilla—the highest of all apes—and man, in reference to this transmutation hypothesis.

The skeleton of an animal may be modified to a certain extent by the action of the muscles. By the development of processes, ridges and crests the anatomist judges of the muscular power of the individual to whom a skeleton under comparison has appertained. A very striking difference from the form of the human results from the development of

certain crests and ridges for the attachment of muscles in the great apes; but none of the more important differences on which the naturalist relies for the determination of the genus and species of the orangs and chimpangus, have such an origin or dependent relation. The great superorbital ridge, e. g. against which the facial line rest in is not the consequence of muscular action or development; it is characteristic of the genus *Troglodytes* from the time of birth, and we have no grounds for believing it to be character gained or lost through the operation of external causes, inducing particular habits through successive generations of a species. No known cause of change productive of varieties of mammalian species could operate in altering the size, shape or connection of the prominent premaxillary bones, which so remarkably distinguish the great *Troglodytes gorilla* from the lowest races of mankind. There is not in fact any other character than that founded on development of bone for the attachment of muscles which is known to be subject to change through the operation of external causes. Nine-tenths of the differences which have been cited, as distinguishing the great chimpanzee from the human species, must stand in contravention of the hypothesis of transmutation and progressive development until the acceptors of that hypothesis are enabled to adduce the facts demonstrative of the conditions of the modifiability of such characters. Moreover, as the genric forms of the ape tribe approach the human type they are represented by fewer species. The unity of the human species is demonstrated by the constancy of those osteological and dental peculiarities which are seen to be most characteristic of the *bimana* in contradistinction from the *quadrumana*.

Man is the sole species of his genus (*homo*)—the sole representative of his order (*bimana*); he has no nearer physical relations with the brute-kind than those which link together the unguiculate division of the mammalian class.

Of the nature of the creative acts by which the successive races of animals were called into being we are ignorant. But this we know, that as the evidence of the unity of plan testifies to the oneness of the Creator, so the modifications of the plan for different modes of existence illustrate the beneficence of the Designer. Those structures moreover which are at present incomprehensible as adaptations to a special end, are made comprehensible on a higher principle, and a final purpose is gained in relation to human intelligence; for in the instances where the analogy

of humanly invented machines fails to explain the structure of divinely created organ, such organ does not exist in vain if its truer comprehension in relation to the Divine idea, or prime exemplar lead rational beings to a better conception of their own origin and Creator."

Table of Urinary Deposits, with their Microscopical and Chemical Tests for Clinical Examinations. By JOHN KING, M.D., of Cincinnati.

This John King, we presume, is the author of the Eclectic Dispensatory. This is a tabular view of urinary deposits and tests, with engravings of the microscopic crystals and other objects, and a brief statement of the remedies to be used in each case. It is curious to see how far the Eclectics have departed from the old Botanic system from which they sprung. Thus in one short sentence the table advises the following mineral remedies: "Iodine, iron, iodide of iron, nitro-hydrochloric acid, and tincture of chloride of iron."

We have not examined closely enough to decide whether the tables are free from mistakes, but if they are, we presume the facts which King has compiled are just as true as they were before he compiled them, and that an intelligent physician who will analyze urine by his knowledge of these facts, whether he get it from the tables, or from the books on the subject, will arrive at the same valuable results. We give these opinions with fear, and trembling, having the edge of the *Western Lancet* before our eyes; yet it seems important, after all, that somebody should recognise the fact that truth which a quack has stolen and run off with, it truth still, and that the fine gold of science is not dross, when it happens to be thrown into a box of dross.

E. A.

A Dictionary of Medical Terminology, Dental Surgery, and the Collateral Sciences. By CHAPIN A. HARRIS, M.D., D.D.S., Prof. of the Prin. of Dental Surgery in the Baltimore College, &c. &c. Second edition.

This work is handsomely got up by Lindsay & Blakiston of Philadelphia. The first edition we believe was pretty nearly confined to Dental Terminology, but the present one has added about eight thousand words with the view of rendering it at once a book to be used both by the dentist and the physician. In its present form it is a very practical thing

not only for dentists but also for all that large majority of physicians who have to do a good deal of dentistry with their other practice, in consequence of being located at a distance from large towns. As a *medical* dictionary, it is not as complete as some already before the world, but the physician not located in a city can well spare some of the elaborate fulness of the purely medical lexicon, for the sake of making room for dental surgery, which whether he will or not, he must practice to a considerable extent. To dentists the work is invaluable. We notice in it some choice articles on weights, measures, instruments, operations, medicines, etc. We recommend the book.

WORKS RECEIVED.

We have just received the following works from Blanchard and Lea, Philadelphia. They were delayed a long time in transportation, but having at length reached us we shall proceed to notice them as fast as possible.

Griffith's Formulary,
 Hughes on Auscultation,
 Parker on Syphilis,
 Bennett on Tuberculosis,
 Wilson on Hair and Skin,
 Owen on Skeleton,
 Bushman's Physiology,
 Carpenter's Comp. Phys.,
 Meig's on Childbed Fevers.
 Gross on Foreign Bodies,
 West on the Os Uteri,
 Jones' and Seveking's Path. Anat.,
 What to Observe.
 Catalogue of Medical Books.

The catalogue can be found at all bookstores.

We have also received Harris' Dictionary of Medicine and Dental Surgery, from Lindsay and Blakiston, which was also delayed *in transitu*. See notice of the same.

All these and other medical works may be obtained of A. B. Wood & Co., Ann Arbor.

CATALOGUES.

S. S. & Wm. Wood of New York, have sent us their catalogue of

publications. They send copies by mail free of postage to all postpaid applicants. Those who wish to obtain new books should send first for a catalogue to make their selections by.

Woods publications may be obtained of A. B. Wood & Co., Ann Arbor.

Report of the Sanitary Commission on the Epidemic Yellow Fever of 1853. Published by Authority of the City Council of New Orleans.

This is just received. We will give it a review as soon as we can make room in our columns.

MISCELLANEOUS.

Differential Diagnosis of Syphilitic and Non-Syphilitic Disease of the Testicle.—Dr. Markoe, of the New York Hospital, in a lecture, thus contrasts the two in the Medical Times:

SYPHILITIC FORM.	NON-SYPHILITIC FORM.
1. Begins in testicle.	1. Begins in epididymis.
2. Smooth and regular.	2. Irregular and knobbed.
3. Hard and painless.	3. Less hard and more painful.
4. Scrotum unaffected.	4. Scrotum early adherent.
5. Both testicles involved.	5. Usually one only.
6. Hydrocele very common.	6. Hydrocele rare.
7. No suppuration of fungus.	7. Abscess of fungus common.
8. No glandular affection.	8. Glands of groin enlarged.
9. Venereal appetite gone.	9. Not ascertained.
10. Treatment successful.	10. Treatment unsatisfactory.

A New Doedorizer.—Dr. W. H. Robert, of Orion, Alabama, writes us that he has found a solution of *sulphate of copper* as good as chloride of soda, for dispelling the odor in suppurating wounds and ulcers. He uses it of the strength of an ounce to a gallon of water, and keeps a compress saturated with it constantly applied.

A Work on Mal-Practice.—Dr. Stephen Smith, of New York city, and associate editor with Dr. Purple of the New York Journal of Medicine, announces that he has in preparation a work on *Medical Jurisprudence*, in its application to the Practice of Medicine, Surgery, and Midwifery, in the United States. And as it will greatly facilitate its completion for the press, members of the profession will please communicate to the author, reports of trials, facts relating to suits threatened or instituted on any subject connected with medicine.

Inga: a new Astringent.—This substance enjoys a reputation as an astringent and tonic in some European countries, and also in America. The bark is compact and heavy, and its fracture presents alternate layers of white and red. When chewed, it is found astringent to the taste, and quickly imparts a red hue to the salvia. It is rich in extractive principles. The alcoholic extract resembles that of rhatany, both in its color and general properties. In America, inga is extolled as an astringent tonic in diarrhoea, in gonorrhoea, in hæmoptysis, in incontinence of urine, and in relaxation of the tissues. As an antiseptic in its powder has also been used in the same instances as cinchona. Some trials already made in Paris appear to justify its reputation and its claim to rank in our *Materia Medica*.—*Dublin Hos. Gaz.*

Pumpkin Seeds for Tape Worm.—A sufficient number of cases have been reported to show that the emulsion made of Pumpkin seeds possess some real efficacy as a remedy for the expulsion of *tape worm*.

The usual mode of using it, is to remove the rind from the seeds, bruise the latter in a mortar, and infuse them in water, in the proportion of two ounces of the seeds to half a pint of water. After standing a few hours the whole assumes the form of an emulsion or thick mucilage. The whole of this should be taken by an adult, in the morning fasting; and in two or three hours after, sufficient castor oil should be given to move the bowels freely. If the dose does not cause the expulsion of the worm, repeat the same the following morning.—*North Western Med. and Surg. Jour.*

Mr. Luke's Strangulation Test for Hernia.—If the body of the hernial tumor be compressed by the hand, an impulse is communicated to all its parts below the seat of stricture; but, if the neck of the hernia be grasped between the finger and thumb of the other hand, above the stricture while such compression is made, there will not be any impulse felt. When, in the commencement of the examination, the neck of the tumor is first grasped, we may be always assured, that if an impulse is felt on compression of the tumor itself, the seat of stricture is nearer the abdomen; and, by gradually drawing the finger and thumb in that direction, while renewed compression of the tumor is made, a point will soon be reached at which impulse ceases to be felt. The point at which impulse first ceases to be felt is the seat of stricture. In like manner, if an impulse is not felt when the neck of the tumor is first grasped, we may be equally assured that the stricture is situated nearer to the body of the hernia; and, by a like gradual approximation to it with the finger and thumb, an impulse shortly commences to be felt. The point where the impulse commences to be felt is the uppermost part of the strangulated contents, which implies that the stricture is immediately above it; and, on inquiry, it will be found to correspond with the indications of an examination commenced from below. The value of acting on the indications of this simple proceeding when its application is practicable is at once apparent, as unnecessary division of the soft parts is thus avoided.—*Med. Times and Gazette.*

THE
PENINSULAR
JOURNAL OF MEDICINE
AND THE COLLATERAL SCIENCES.

VOL. II.

JUNE, 1855.

NO. XII.

ORIGINAL COMMUNICATIONS.

ART. I.—*Transactions of the Michigan State Medical Society.—
Third Annual Meeting, held at Ann Arbor, March 29th, 1855.*

(Continued from page 512.)

The summer of 1853 was remarkably healthy, there being still a few scattered cases of scarlatina, and some angina. It was remarkably dry, and therefore the swamps and marshes which are usually wet, were dried up, and almost no cases of marsh fever occurred; very few indeed, in comparison to previous seasons. The same may be said of the past summer. There was nothing remarkable about the winter of 1854-5, as far as disease is concerned. In the spring of 1854, a disease similar to scarlatina, showed itself in a neighborhood which the previous visitation had left untouched. There was angina, fever and a rash, with much itching and burning of the skin. It was mild, running its course in 3 or 4 days, and required no treatment.

The past summer has been remarkably healthy, there having been but little marsh fever, but few cases of diarrhœa, but few of dysentery and no choleroïd cases. The only thing remarkable has been the appearance of typhoid fever, a disease hitherto unknown in this region. A family formerly residing in Detroit, moved into this town, one of its members having just recovered from that disease. The mother was taken soon after their arrival here, and went through a course of 3 weeks duration.

Shortly after she recovered, a daughter was seized, and soon after another; and then, in a few days, a son, who were all sick together. During their illness a hired boy was seized and also a hired girl, both of whom had a course of the disease. A married son having a home of his own, often visited his father's family, and he was soon taken down and had a long course of fever. During his sickness a hired girl was seized with the same disease. A few other cases occurred, but none of the disease has shown itself recently.

It is quite healthy at this date, there being no disease which affects as an epidemic, and but few cases of diseases which usually prevail at this season of the year.

Regretting that I am unable to give you a more satisfactory and systematic report, I am very respectfully,

Your obedient servant,

GEORGE PEYRY.

Salem, Dec. 21, 1855.

In Ann Arbor, some cases of cholera occurred during the summer. The first cases were those of four foreigners, put off from emigrant train of the Michigan Central R. R.—put off about the last of June. Three of them died.

A gentleman who had been residing in Chicago was attacked soon after his arrival here, and died in the usual manner. Subsequently, a young lady in Ohio, who had been visiting in Chicago, being troubled with the ordinary premonitory symptoms, left that place and came to Ann Arbor for safety. When she arrived here, her diarrhoea continued for more than a week, but as it seemed mild she merely took something intended to restrain it, but sent for no physician. In about 24 hours after her arrival she was taken with violent symptoms and died in ten hours.

A German woman, pregnant, and in feeble health, was also attacked and died. Several German and Irish children who had been indulging in large quantities of green fruit, was also attacked and died with choleroïd symptoms. Some other deaths were reported to be of cholera, but turned out on investigation to be from other diseases.

The total number of deaths from cholera, or disease closely resembling it, was about eleven. Of these, six were of emigrants, and others who had been traveling. Four were produced by eating unripe fruit, and one from cause unascertained. About seven were foreigners, and four Americans. The disease subsided before the middle of August.

During the present winter small pox and varioloid prevailed in several places in the county, but most severely at Ann Arbor. The first case was that of a young lady who is understood to have been exposed to the contagion during a visit to Dearborn, in Wayne county. She came home, was taken with the disease and died. A young man, also, who came to attend the University was without his knowledge exposed somewhere on his journey, and taken down very soon after his arrival. From these two cases the contagion spread with unusual facility to others. It seems that some epidemic influence was at work which rendered the slightest exposure to the infection effectual, and numbers, well protected by vaccination, who in previous years had been among small pox cases with impunity, now took the varioloid at very slight exposure.

In the same house where the young lady died four or five medical students were boarding. There having been no cases of small pox here before for a long time, her disease was considerably advanced before any one seems to have found out its nature, and the clothes of the students boarding there had ample opportunity to absorb the effluvia, and an excellent chance to distribute the same in the crowded lecture room of the Medical College which they were attending. The wearers of the garments, however, becoming aware of their danger earlier than the rest, averted it from their own persons by a timely vaccination, and all escaped, though one of them had never before been vaccinated. The contagion however spread with great rapidity in the rest of the medical class, so that the fact attracted attention and gave origin to the absurd report among the citizens that the students had dug up and dissected the body of the person before mentioned, and thus caught the disease. None were found zealous enough however to test their suspicions by an examination of the grave, and the gossippers, rather than take a little trouble to ascertain the truth, contented themselves with retailing a false rumor calculated to wound the feelings of friends. Several students had from neglect or previous insusceptibility never had vaccinia, and of these three died, three of the most beloved and respected in the class. Two of them had the confluent form, and the third the distinct. Something like thirty persons in the place, including students, took varioloid, all of them having been protected by previous vaccination—and of these, not one died, while of those who had not been protected, scarcely one survived. This set the benefits of vaccination in strong light. Of the cases of varioloid one was as severe as an ordinary case of distinct small pox, but it termi-

nated in recovery. The others were mostly of light attacks, some of them not presenting more than half a dozen pustules. They were preceded by a chill, pain in the back, and the usual symptoms. It was a matter of interest too, to observe that many persons were taken with a chill, head ache, pain in the back, and in short all the rational premonitory symptoms in whom the eruption never appeared.

It was obvious that for some cause the communication of the disease was unusually easy. Persons who had in other seasons exposed themselves freely to small pox with impunity, and considered themselves proof against it, now took the varioloid from the most trivial exposures. Vaccination, too, seemed to take with remarkable facility, persons obtaining the action of the pustule who had never succeeded before, even after numerous trials, and of those who had had the kindpox thoroughly, an immense number took it again, and some of them had it with great violence.

Slight erysipelas attacked some of the arms, but did not terminate seriously. As Spring approached the epidemic subsided and disappeared.

Jackson County is next west of Washtenaw. The face of the country in the two is much alike, and the degree of the cultivation of the soil about equal. Geologically the country rests upon the rocks of the Michigan coal basin. From this section we have a report by Dr. Tunnicliff of Jackson. As the paper consists of two parts, one referring to the region under consideration, and the other to more distant places, we divide it and give the part which refers to Jackson here, and reserve the rest till we come to speak of other regions:

DISEASES IN JACKSON COUNTY.

With regard to the diseases of this locality, during the years 1851, '52, '53, and '54, I am certain that nothing can be offered which can prove of great utility.

It is true that we have had epidemics; but with the exception of the few cases of cholera of last Summer, they have scarcely proven sufficiently *grave* to justify any lengthened history.

The ordinary epidemics of this region, such as Intermittents (which of late have become comparatively few) Remittents, with their myraid complications and typhoid tendencies, Diarrhœas, Dysenterys, Neuralgias, Scarlatina, and Pneumonia comprise the diseases of that class.

Intermittents are very frequently complicated with neuralgia, also with

diarrhoeas; and many of our remittents which ultimately assume a *typhoid form*, were in their origin simply *complicated intermittents*.

Perhaps such may be the legitimate course of some cases; yet I am convinced that it is frequently the effect of improper treatment.

The thousand irregularities which characterize those diseases, at their onset, I am aware, seriously interfere with a just diagnosis; and thus lead to erroneous treatment.

Few practitioners perhaps can be found, however eminent, who have not occasionally erred in this manner.

I was called June 1, 1854, to visit W. H——, six miles distant.

Just before our arrival, a messenger informed me, that the patient had been sick four days, and had been in charge of a practitioner (an Eclectic) in the vicinity who had been called that morning to meet me on my arrival.

It appeared that he had not been consulted with reference to counsel; and was angry with the *family* for sending, and with *me* for coming.

The consequence was that our intercourse was at first very formal and dignified.

The doctor looked very wise; the *subscriber* looked very *wiser*,—and the *family* looked absolutely scared.

The poor patient was the only one present, whose condition precluded his enjoyment, of this modern exhibition of native animals.

After growling around a few times *very scientifically*, we finally broached as follows:

“Doctor be so kind as to give us a history of this case.”

The substance of which I gathered from him as follows:

That H——, six days previously had been attacked with chill, slight diarrhoea, pain in right side and cough, succeeded by slight fever and followed after three hours with a distinct intermission.

That the next day at about the same time, a repetition (slightly increased) of the above symptoms had occurred, succeeded by a greatly aggravated recurrence of them on the the third day, with marked tendency to *delirium*. That he had been called at that time; that the diarrhoea had increased, the pain had not lessened, and that the *chills* and *fever* were now on, almost simultaneously and nearly constant, and that he had been *deranged* for the last 36 hours.

I next examined the *patient*. His pulse was 140, his breathing 50

per minute. His tongue slightly reddened and covered with a thin white fur.

His bowels moving every half hour sero-bilious evacuations. A slight dry cough, urine scanty and red, skin moist, shrunken and cool; disposed to sleep constantly, but with a little effort, could be aroused sufficiently to give brief rational replies. *This all looked very bad.*

The doctor perceiving that I fully appreciated his bad state, with increasing confidence drew a little nearer; appearing really gratified at the tacit acknowledgment I had already manifested of the patient's really bad condition.

I remarked, doctor your patient is very sick.

Oh yes, said he, (evidently relieved.)

"He has been very bad all the time and all *I* could give him; did him no good; *he'll die sir.*"

What do you call the disease doctor?

"*Oh*, that's plain enough. Its *congestive fever.*"

Where is the congestion doctor?

"*Oh*, on his brain, on his bowels and on his lungs."

If he is diseased like that he *will* die soon.

"Of course he will," said he. "You nor I can do him no good," coming quite near, speaking very confidentially.

What have you given him doctor?

"*Oh* I've given him everything."

Well, what were the principal articles?

"Calomel, antimony, ipecac and blood root; and yesterday I gave him, large doses of quinine, *to break it*, but he was worse." "What else, could I give?" he enquired.

Oh, I think you have given enough. It appears, that not detecting the intermittent character of the attack, *he* failed to administer antiperiodics in season. It then became remittent, the fever increasing on him. He had increased the calomel and antimony with the view of their sedative and febrifuge qualities, the diarrhoea became dysentery; the remittent became *typhoid continued*, and seeing no amendment, he had changed to a strong decoction of sanguinaria and antimony, alternated with 5 grains powders of quinine.

He stated that his pulse had been frequent and feeble, all through.

Why did you give so much antimony doctor while the pulse was so low and the diarrhoea continued?

"To break the fever," said he.

And then *why* did you give the blood root and quinine, when he had so much fever, as manifested by his *thirst, dry tongue, &c.*

"To break the fever," said he. I by this time concluded that if he was a practitioner, he was a mighty *irregular one*.

Said I, you are a much older man than myself, yet really I should like to know *where* you were taught such *practice*.

"In the school of common sense, sir," he replied. "I've no second hand knowledge of diseases; what I've learned has been by my own observation and practice; and I'll teach you, young upstart, better than to come out here to quiz older and wiser heads in this manner. *Why, sir, I was practising physic when you was a suckling at your mother's breast.*"

So much the worse for *medicine for you* and for *your patients*, I replied. If *you* have practised thus long and have learned so little I apprehend you have made a bad use of your opportunities.

I now proposed to leave. The family however insisted on my making an effort to save the dying man; and they became so urgent—with an utter disregard of the presence of the doctor—that he picked up a huge pair of saddle bags, and rushing out of the house "vanosed the ranch," as the Californians say.

I applied a large vesicating plaster over the right lung, ordered sinapism on the extremities, jugs and bottles of hot water at his feet and beside his limbs, gave him a powder of opium gr. j., calomel gr. j., ipecac g. 2. ss. He had but one evacuation after.

Morphia 1-8 to 1-12 gr. was now substituted for the opium, and the powders continued every four hours, alternated with a solution of ipecac, (ip. g. x. qua $\frac{3}{4}$ iv.) teaspoonful every 4 hours.

Left powders of Rhatany, grs iij., opium gr. j., to be given every time the bowels moved.

Next day found him more rational; bowels quiet; chills had left; fever continued but had lessened very much; had sweat almost constantly; his pulse 120 and more full. In the night bloody expectoration had commenced and continued abundant. He was more wakeful and thought he felt better. He mended from this time forward, slow but constant.

He had a low irritative fever which lasted him about 14 days; from the time I took him in charge and from that period he recovered rapidly.

Now, sir, does it not occur to your mind, in reviewing a case like this, that it might easily have been arrested at the onset, while it was an intermittent?

— The constant unguarded use of calomel and antimony, with the consequent nausea, prostrated the energies and diverted the fluids to the bowels; aggravating the originally slight local affection there, and all combined to prevent a healthy reaction of the energies against the disease.

As noticed, the almost constant chill, alternated every few minutes with a slight flash of febrile effort; the depressed pulse and constant feeling of exhaustion, showing conclusively, that to carry the *disease* and *doctor both*, was too much of a load by *odds*.

I will not here undertake to tell you what in my opinion should have been done, for every *well educated* physician with ordinary prudence and foresight, would, in the intermittent before him, have detected an incipient typhoid pneumonia, and arrested its course on the onset.

I do not contend by any means that all pneumonias may be thus arrested, for we all know that many of them cannot be.

Neither are they all intermittent but such as are by the use of anodynes, sudorifeis, and antiperiodics timely administered, *all* or nearly all might thus be arrested.

It is to be regretted that frequently the disease has become fully established and valuable time lost in a reliance on the inefficiency of domestic medication.

I am fearful that I have amplified too much in this communication already; and will close by answering your 18th interrogatory, in which you require whether the diseases have changed their type, and if so, whether they have become more *typhoid* or more *sthenic* in their character.

I answer *emphatically*, and have heard the same opinion frequently expressed by all or nearly all of our physicians, that there is a distinct typhoid tendency to nearly all of our active diseases at this time.

There is no doubt that the physician who has the temerity to use the lancet, pursue active purgation for a length of time; or, injudiciously administer nauseating remedies beyond the period of absolute necessity, will *too often* when *too late* find that instead of ridding his patient of disease, he has got rid of the "*Vis Medicatrix*" and the forces and es-

sential elements of reaction, so necessary to enable it to expel the enemy and reinstate the vital functions to their normal condition.

Truly yours,

J. TUNNICLIFF, JR.

Jackson, Mich., January 12, 1855.

Concerning other parts of the State, the committee are obliged to say that they have not been furnished with information and consequently cannot report.

In neighboring states the same epidemics prevailed as here. From the report of the Buffalo health officer we condense the following abstract of the cholera in that city during last summer. The number of cases was as follows:

MONTH.	CASES.	DEATHS.
June 1854,	17	9
July "	454	221
August "	392	232
Sept. "	161	99
Oct. "	10	8
Totals	1034	269

Appended to the same report is an account of the outbreak of cholera at the Suspension Bridge, which created so much excitement. We make the following extracts:

"The first case of cholera which ever occurred in the village among its inhabitants, was on the 17th of July of this year, in the person of an American citizen, and a very intemperate man. The second case occurred on the 19th. This was an old lady of excellent habits, a citizen also, living in a hotel called the Bellevue house. From this day it increased with terrible rapidity and fatality.

"On the 21st ten died; and on the 22d thirteen died, and it then gradually declined, and the last fatal case occurred on the 31st. Between the first and last dates, a period of fourteen days, about thirty-seven died and about twenty more were attacked and recovered.

"I have remarked that most of the village is situate upon high ground which rapidly descends towards the river. Near the foot of the declivity, however, and running parallel to the river, there has been recently

constructed a street, called Spring Avenue. It is, like the village above, composed mostly of new frame buildings, of from one to three stories in height, in all numbering about 18 houses, and there are besides seven or eight shanties. The population is American and German mostly, generally temperate and living comfortably. The shanties are chiefly occupied by Irish.

"The entire population of this street, including those at work here, was, when the cholera broke out, about two hundred. Of the thirty-seven who died in the village, thirty-three either lived altogether in this street (Spring Avenue,) or boarded there, or were employed upon this bridge, on and about Spring Avenue. It must be known also, that immediately on the breaking out of the cholera, many left the street; and that on the 21st and 22d, when so many died, not one quarter of the population were remaining. I do not think more than fifty people could be found in the street on Sunday the 23d, and of these one-half were dying or dead. I am reducing this now to what must appear as the appalling fact, fifty per cent. of the actual population of this street, on the 21st and 22d, i. e. of those who died, and of those who were attacked on those days, not more than three or four recovered. In most of the cases the rice-water discharges and the cramps were present as soon as we saw them, and death occurred, on the average, within twelve hours.

"Of forty men employed on the bridge at both ends, twenty-three died; and among these was the contractor himself, and three out of four of the toll-gatherers. The remainder of the hands fled, and the work was for a time suspended.

"Total cases on both sides of the river,	-	-	-	90
" deaths " " "	-	-	-	70
" cases on American side of the river,	-	-	-	55
" deaths " " "	-	-	-	37

Of all the cases ten were women."

Of Ohio we have no definite accounts, but we are informed that during the winter small-pox has had a pretty extensive circulation there. From Chicago we learn that cholera took a severe hold. It was not confined to the wretched and filthy but selected victims from the best families. An account of the epidemic there may be found on the 136th page of the present volume of the *Peninsular Journal*. We make only one extract and refer to the *Journal* for a fuller account.

"In a population of 70,000, the whole mortality for May, as taken

from the City Sexton's reports, was 147, for June 331, and for July 912. It must be confessed that for a few days of the most severe sickness, there was some confusion in the accounts of the Sextons, and a few cases were probably interred in an irregular manner, which were not properly reported.

The greatest number of cases reported in one day was 44, while it is probable from the best information within our reach (and we have taken pains to investigate the subject) that for three or four days the number was as high as fifty per day. Of the proportion of deaths from cholera and other diseases, as already stated, we have not precise data upon which to rely, but during the month of July a little over one-half probably were from cholera, or about 500 during the month, which would make an average per day of 16 deaths from that cause. From this statement which is very nearly the precise truth, it will be perceived that the accounts of hundreds being swept off daily, is entirely fallous."

The following paper from Dr. Tunnickliff treats of the diseases of the ultra west, although not embraced in the field of this society, yet the interest that attaches to that region renders it proper that it should be introduced into our report: .

DISEASES OF THE MOUNTAINS, AND THE PLAINS—BY TUNNICLIFF. .

Jackson, Mich., January 10th, 1855.

Professor Sager:

SIR:—In article 2d, No. 3, volume 2d of the Penninsular Journal of Medicine, a request is made of the physicians of Michigan and adjoining States, that they should each transmit to you, as president of the "Medical Faculty of the University of Michigan," for the benefit of the Penninsular State Medical Society, an abstract of his observations of the diseases of 1851, '52, '53, and '54.

I will not attempt to render a full account of the diseases of this *locality*, through the entire period mentioned, not having the necessary notes to enable me to do so, but will, from memory, volunteer an account (which must necessarily be somewhat desultory) of the diseases I was called upon to treat during an overland journey to California in the year 1852, concluding with a slight reference to the principal diseases of this locality since my return to this State in the Spring of 1853.

As a prelude to the diseases of the *Platte Valley*, a faithful topogra-

phy of the entire region should be first introduced. The space which could properly be devoted to such a purpose in a communication of this kind, must necessarily be small, yet I will undertake in brief to point out its main features.

Six hundred and fifty miles above the junction of the Missouri and Mississippi, and forty or fifty miles below Council Bluffs, the Platte River empties into the Missouri.

The altitude of this point is I believe, about 1000 feet above the Gulf of Mexico, and, on or near the 41st parallel of north latitude.

Eight hundred miles westward from this point, on either bank, the emigrant to California or Oregon follows the Platte River to a point near where the Sweetwater becomes its tributary.

This entire region, lying between the Yellow Stone on the north and the Kanzas on the south, comprising an area of about 400,000 square miles, was, at the time I refer to, inhabited almost entirely by Indians, with the exception of a few forts, the main ones of which were Forts Kearney and Laramie. 150 men at Kearney and 300 at Laramie would comprise, all told, the resident inhabitants of those localities at that time. Otoes, Paroners, Sioux, and Cheyennes, (besides a few tribes with whose name I am not familiar) with a few mountaineers, comprised the inhabitants proper of this entire region.

I do not propose to treat of the *diseases proper*—the above may be subject to; but there were 80,000 people in the Platte Valley at the time I was, exclusive of those above referred to, and they were of every "*nation kindred and tongue*," known to the civilized world almost.

Perhaps there cannot be found in the world's history, a country so large, and so utterly worthless in the main, and has been the fruitful source of so much honest anxiety and alarm in providing for its future destiny as this same territory of Nebraska.

A thorough acquaintance with a large portion of it has convinced me that it was the last place unfinished in the great creation,—"*they lacked timber to complete it.*"

Comparatively, I might state it has no timber, no good water, no proper agricultural soil, and no rivers. For the Platte, although having perhaps as many cubic feet of water as the Hudson at Albany, can scarcely be navigated with a loaded canoe, by far the greater portion of the year.

The Platte Valley averages perhaps six or seven miles in width. From May to September, no floods intervening, it is covered with grass.

It has its annual floods however when it is from two to four feet under water.

Springs abound, but they are nearly all strongly impregnated with salt (chloride of Sodium) alkali, (carbonate of potassium) or iron (Sulphuret and carbonate,) and the only water that can be used with safety is Platte River water, which you can at any time prepare at your leisure, according to following *formula* :

R_x Rocky Mountain water 8 quarts.

Good pure ashes, 1 lb.

Soft Soap, $\frac{1}{2}$ lb.

Quicksand, 6 lb.

M. f. Solutio, and *shake* thoroughly, and you have excellent Platte water.

You are directed to get rid of the sand, and the more crude and insoluble elements of the ashes by letting it stand in a pail over night. And the process of settling it is facilitated by the addition of a little meal. Perhaps so. I did not try. It was the best we had; and, we voted it *good* and used it.

So much for *wood, water and grass*, and essential elements of health and comfort to the traveler.

The trancient population previously referred to, comprised the Englishman the Irishman, the Frenchman the German, the Spaniard, the Yankee, the Buckeye, the Hoosier, the Wolverine, the Sucker, the Badger and the Puke; besides the Subscriber and a "*Power of others, I reckon.*"

Did you ever eat any western *bacon*? Perhaps you have not; and as it is an important aliment with the inhabitants of Nebraska, I will tell you that it is unsalted side pork, sufficiently smoked to ensure it against any possible extreme of temperature. This with *bread and coffee* are the main essentials as food.

Bread made of wheat flour, warm water and *saleratus*. *

I often enquired of them of what benefit was the *saleratus* in the compound without acid, their reply was "that it made it *richer* and they thought *lighter*;" of course it made it yellow and strongly alkaline.

We crossed the Missouri on the 12th day of May, and were some time in the midst of this immense multitude of travellers. Men, women,

* The Pukes (as they are called) of Missouri made their bread in this manner.

and children; horses, mules, and oxen; cows, sheep, turkeys and dogs. A mottly crew I assure you. A more heterogeneous mass was seldom seen. Most of them had an abundance of the *ardent* and dealt in it bountifully.

It is about 700 miles from St. Joseph to Fort Laramie. The entire road is lined with graves; it is one continuous cemetery. *Here Asiatic Cholera* has reveled in unmatched undisputed power and virulence.

Cold and *Rainy* weather, bottomless mud, anxious night watching to protect property from nocturnal depredations; with the change of food from comfortable living to greasy bacon, *hard* bread, and *worse* coffee, combined to fit the system most admirably for almost any epidemic that might get in our midst.

Cholera and *small-pox* appeared, and few -if any, recovered at that portion of the route.

Generally all were anxious to proceed, and if any were taken down, the cry was "*Go ahead.*" "We can't wait for him." "If he has cholera he'll die soon."

The blue stage had generally set in before a physician was called; and he might argue and remonstrate till doomsday, to induce them to stay for a short time, so that medicine and quiet might give him *one* chance for recovery.

But it was generally useless, "give him medicine doctor, and let him lie in the wagon and we'll go on. But hold.—You can do better than that, "take out your knife and cut his throat," said I. "it will take but a few minutes to bury him, and then you can go on."

This might arrest them for a time perhaps, sufficient to enquire our meaning, when by way of explanation, I would say: "It is certain death for him if you go on in spite of medicine."

Occasionally a team could thus be induced to stop for a few hours, but generally, in spite of all remonstrance, the majority of the train would decide to go ahead, and of course the sick were obliged to follow.

A mile or two ahead they had a funeral, and frequently trains of 150 persons buried 3 and 10 a day.

The more that died, the more anxiety to get ahead; and the more struggling to run away from the disease, the more victims it obtained.

Consternation seized them, they made long drives, their meals were thus more irregular: *all* with the view to leave it behind them. but it was with them every *morning*, every *noon*, and every *night*.

Generally a slight diarrhœa preceded the main attack, and yet many were first attacked with faintness, a sense of vertigo; drop down by the wayside, and die in a few hours with neither vomiting nor diarrhœa.

The means and appliances of treatment under such circumstances were of course very limited.

Even when we were allowed control of our patients for a few hours, our remedial means were mainly confined to *opium*, *camphor*, and *cam-tuinitatine* with *mustard* and *dry friction*.

Brandy was used bountifully in many cases, but I saw few if any, in which I thought it was of any benefit.

It was too frequently the case that when the first evidences of disturbance occurred they took some drastic cathartic pills, and that placed the matter beyond all control when the physician arrived.

I am free to acknowledge that I have never been in circumstances either before or since, in which I felt that as a physician, I was really of so small account as now.

The *idea* of its contagiousness is a great embarrassment, even surrounded by all the comforts and conveniences of home.

But *here* the instant the destroyer appeared, all ties of "*kindred*, *home* and *country*," were forgotten in the one absorbing idea of its contagiousness. *Families* separated, *companies* dissolved, and *trains* were scattered. *Cholera* and *confusion*, "*ruled the day and the hour*."

That cholera is transmissible there can be no doubt. That the *Havre Packets* brought it direct to Staten Island and New Orleans in December 1848—there is no doubt. That the human body is or was the vehicle of transmission must be exceedingly doubtful to any observant mind familiar with the disease.

I have long ago in my own mind decided against its contagiousness. This is an essential point gained in securing good nursing, so valuable in a disease so rapid and formidable. It diffuses confidence in those about you, and I have never had reason to regret it or question its propriety from subsequent experience.

All prescriptions made were of course to meet *urgent present* symptoms.

No systematic treatment could be instituted, as generally we never prescribe for or see our patient for the second time. Thus you will see, any report of the treatment pursued must be disconnected and unstigmatized as the treatment itself.

We were frequently solicited to give our opinion of the cause of cholera. Some, attributing its appearance and fatality to the Platte water, refused to use it. They dug small wells and opened springs, (for generally through the entire valley, by digging three feet, plenty of water is found) using them for a few days and finding the water much worse, go back to Platte water. Others laid it to the bacon; and a few were so improvident and unwise as to throw it away; they, long before they reached the Rocky mountains, had abundant reason to regret their folly.

Finally, the fated region was passed, and after leaving Fort Laramie no cholera appeared.

The disease was at St. Louis, at St. Jo, and at many points along the Missouri and it was there we purchased our supplies of bacon, fish, cheese, apples, blankets, &c. It is true the disease did not appear at first after leaving the Missouri; still its elements of extensive development were with us, let such elements be what they may; and when hard labor, mental and physical; sufficient exposures and irregularities of diet, had done its preparatory work within us, the latent *monster* was developed, and made us feel his power in a manner never to be forgotten.

The South Pass of the Rocky Mountains is at an elevation of about 7000 feet above ocean level. The transit of the Utah Range is made at a still greater altitude and many days are occupied in traversing both.

The atmospheric changes which the physical system must experience and respond to, during this time, after weeks of toilsome journeyings and exposures to the intense solar heat and pestilential atmosphere of the valley below, induce a peculiar form of disease, known among western men as "*mountain fever*."

Long before we reached the mountains, I had heard frequent glowing accounts of the fatality of mountain fever, as it had manifested itself in the trains of those among us, who in previous years had preceded us on the road we were now travelling.

Insanity was said to be a most remarkable concomitant, that many were attacked with this alarming symptom at the onset, with no premonition. Moniacal manifestations of the most extravagant character, for which nothing appeared to offer any alleviation, followed by certain death in from 36 to 48 hours.

Of course we were all expecting to "*see the Elephant*" and were not so much disappointed to *hear of him* a little in advance.

The above description must be taken with a degree of allowance, coming as it did from "*returned Californian*," having no especial knowledge of disease, *but* a very magnanimous appreciation of what they themselves had *seen* and *passed through*, without receiving so much as a *scratch*.

Of course in the above allusion of returned Californians, I do not include those who came here since 1852. How unfortunate it is that mankind generally do not discover their *heroism* until after the danger is passed!

Eight hundred miles travel occupying a large portion of May and June through the Valley of the Platte, notoriously among the hottest portions of the earth, with the toils anxieties and exposures all of which we are unaccustomed to, combine very much to debilitate the system.

Digestion during this time has been taxed to its utmost capacity, the arid dusty atmosphere, with the consequent thirst, has induced the use of an astonishing amount of water as drink.

All the emunctories, have necessarily been prematurely active and outraged.

The excitement and constant labor has enabled us thus far to dispose of the excess without suffering disease.

But in ascending the mountains from this point, we within a few days reach an elevation of 7000 feet, and after a few more days 9 or 10,000 feet. Atmospheric pressure is of course less; the heat of the day lessened and the cold of the nights increased to a most uncomfortable degree.

Sensible perspiration diminishes and finally nearly ceases.

The kidneys are called upon to perform the functions of the skin in addition to their own.

The bowels are inclined to constipation, the countenance becomes flushed and full, the body, hands and feet, swell, and the appetite and digestive powers remain undiminished.

A sudden *plethora* is of course the result of all this; and that before the system can accommodate itself to the change. Many are thus made sick with mountain fever.

All who make the ascent rapidly, suffer *more* or *less* according to the elasticity of their constitutional powers.

It is essentially a remittent fever with *congestion on the brain*.

This complication soon becomes not only formidable but decidedly uncontrollable, if not relieved by proper treatment within twenty-four hours.

So far as I could learn of the treatment generally pursued, *bleeding* and *purging*, observation of its results, would justify the truly alarming accounts I had previously received of its almost certain fatality.

How irrational and unphilosophical to *reduce* the enervated powers by abstracting the most essential elements of strength, without instituting any means for removing the *cause*.

What are the manifest indications of treatment in such a case as this? I answer, induce by any means you can a return of the fluids to the surface; divert them from the overcharged viscera, and relieve the kidneys by reinstating the function of the skin; and your patient is already more than half cured.

I will give you one case by way of illustration:

On the 3d day of July, on Hams Fork of the Colorado or Grave River, a messenger overtook us with a request that I would return with him about ten miles, to visit (in council) a friend of his, who lay very low with mountain fever.

His condition when I arrived was as follows:—His pulse 130 per minute; his breathing frequent and labored; tongue pointed, slightly reddened and covered with a thin whitish *fur*; urine scanty and high colored; skin dry and hot, although not as hot as before the bleeding and drastic purging practice had been instituted.

His bowels were still moving frequently under the influence of cathartics. Had been delirious, but now lay stupid, regardless of the things about him.

Dr. ———, a rather clever man was in attendance upon him.

I soon discovered, that their sending for me was more a matter of form than with the expectation of any benefits, as the boys gathered around as I alighted, saying “doctor we are very glad to see you, *but* it is too late, or too bad a case, for, he has been *bled* and *purged*, and, instead of coming to he is more stupid, and takes no notice whatever of what is said to him.”

After a sufficient examination I could conclude on nothing else than that they were probably correct.

“Still while there is life there is hope and we’ll try.”

“What can we do doctor?”—*Sweat him, boys, sweat him.*

We gave him a powder of ipecac, camphor and opium, sufficient to control the bowels and divert to the surface.

Covered him thickly in blankets, placed hot firebrands previously dipped

in water in abundance around him, and placed sinapisms on the nap of the neck, over the abdomen, over the spine and on the extremities.

The powders were to be repeated every 3 hours until he sweat freely.

I now left him, and heard nothing further of him until our arrival at Salt Lake.

One day wandering about the streets of the "*Great City*" I was accosted by an unknown voice,—“Hold on doctor—how are you?—so glad to see you,—dont you know me? I was the doctor you met on Ham's Fork.”

Oh yes, yes! How do you do, my dear fellow? How long after I left before you buried him?

“*Buried him did you say? Why, he was all right in three hours after you left! But, you never saw a fellow sweat so in all your days.*”

As luck would have it, our patient came along just then: a hale, hearty, fine looking fellow. And it was fortunate my brother *chip* was present, as probably we should neither of us have recognized the other. At least I am certain I could never have discovered in the noble specimen of humanity before me, our prostrate comatose patient of Ham's Fork.

Beyond Salt Lake, over the Grose Creek Mountains, down the Valley Humboldt, and in Carson Valley, we had remittent and typhoid fevers, diarrhoea's and dysenterys, having nothing peculiar about them as contradistinguishing them from the ordinary characteristics of those diseases in other localities.

During my journeyings across the Rocky Mountains, I fell in with a mountaineer who had spent twenty-five years trapping and hunting for the American Fur Company, and had become perfectly familiarized with Indian life. In the course of our conversation, I enquired of him the reason why we saw so few Indians in our travels through their territories.

His reply was in substance, as follows: “Indians are all great thieves: and when the emigration commenced in this country, they visited the trains, made themselves familiar and friendly with the view of learning *where* and *when* and *what* to steal. But finally they got ‘what they did not bargain for.’ They got the *small-pox*; and of such *tribes* as thus took it more than one-half died.”

Have they no doctor? I enquired. “Yes, plenty. But t'was a new disease to them, and after a few efforts to relieve them, by *mummers*, *incantations*, and *special appeals* to the *Great Spirit*, for his interposition in their behalf, and witnessing no benefits resulting, abandoned them.

to the *Evil One*, whom they finally decided the whites had brought along and introduced among them to annihilate them all.

He stated further, that most of the tribes, when attacked with any disease, rushed into the lakes and rivers, and staid there until the fever subsided, and when it returned, renew the hydropathic application.

"But," said he, "when they got the small-pox, *all* that got into the water *died soon*."

I enquired further whether Indian doctors ever used vegetable or indeed *any material* remedies.

His reply was, that he had never known them to, and was satisfied that they never did, their treatment was essentially spiritual.

For the assistance and contributions of various medical gentlemen in the State, the committee take this opportunity to express their thanks and only regret that materials were not sent us from which we might make a complete survey of the State

All of which is respectfully submitted.

E. ANDREWS, M. D.,

Chairman of Co'm. on Epidemics.

Voluntary communications being in order, Dr. E. Christian read the following paper, which was referred to the committee on publication:

HYDRASTINE, GERANIN AND VERATRUM VIRIDE.

"Positive Medical Agents,"—Such is the title of a book, published by the American Chemical Institute of New York City. Its object is to introduce to the medical profession the merits of new and concentrated preparations; the active principles of indigenous plants, prepared at the laboratory of the above named institute.

Chemistry has ever been the chief handmaiden of medicine, and in each step of its progress, the light evolved has been so reflected as to guide the path of the enquirer after new truth, in medicine, but chiefly has this aid been contributed since she has essayed to reveal the secrets hidden in the combinations of organic compounds.

On the one hand, by analysing the tissues of the body and showing the differing elements of diseased and healthy structures, by analysing the secretions, and in their deviation from a healthy standard, showing the wants of the system; and on the other, by discovering the elements in which exist the remedial properties of our plants, separating the

useful from the inert and injurious, and furnishing us in concentrated forms the remedies for diseased conditions, in both these ways has it increased the efficiency of the remedial art.

How great the advantages conferred upon the art, with how much greater reliance upon his means, and with how much greater assurance he calculates upon results, since chemistry has furnished the practitioner with the active principles, such as morphine, quinine, strychnine, &c.

Great difficulties have enveloped the process of extracting these principles, and although pharmacutists have known that other medicinal plants contained principles perhaps equally active and equally reliable on which their remedial powers depended, yet these difficulties have prevented their preparation in sufficient quantities, or sufficiently free from foreign matters, to obtain a fair test of their merits as remedial articles. Now, however, if we place implicit reliance upon the authors of "Positive Medical Agents," numbers of these have been prepared, rivalling in their efficacy those above named. Analogy would lead us to believe at once, that they possessed greater powers than the unprepared plant, and it is incumbent upon the profession to enquire into and establish their just merits, both to avail themselves of any increased facility in controlling diseased actions thereby, and also that they should not fall into unmerited disrepute from being appropriated and misused by a one-sided sect of pseudo-physicians, who profess to believe that an all-wise Providence has locked up all the remedies designed for suffering man in one limited portion of his wonderful creation.

A number of these articles having been sent to Doct. Pitcher for trial, it was determined to test their merits, as far as the limited quantity would admit. Cases were subjected to treatment by them at St. Mary's Hospital, with careful observation of their effects, and the results are here submitted in the form of reports of the cases, with some few remarks, and as little theory as possible. First, however, we will give a brief description of the natural properties of some of these remedies used by us, for a more complete history referring the enquirer to the work entitled "Positive Medical Agents."

The *Hydrastis Canadensis* is an indigenous plant growing in different parts of the United States, and known popularly as yellow root, orange root, Indian dye, golden seal, &c. Amongst the Indians it is used as a dye and as a medicine. Has been supposed to possess the ordinary virtues of the vegetable bitters, and its remedial powers supposed to depend

upon an alkaloid principle called by its discoverer, Alfred A. B. Durand, of Philadelphia, hydrastin. The researches of the Chemical Institute however, have shown that its powers depend upon two distinct active principles, the one a resinoid, and called by them, hydrastin, the other, and probably the one discovered by Durand, an alkaloid, and called hydrastine.

Here we would remark, to prevent misunderstanding of the names, that the authors of the work on their new articles have adopted the termination *in* to denote a resinoid, and that of *ine* to denote an alkaloid. The former is a heavy straw colored powder, having the odor of the plant, a bitter taste, and is a pure bitter tonic, and slightly laxative. The latter is the one whose merits we have endeavored to test, in the cases which follow. It is a dark orange colored powder, very light, of a bitter taste, soluble in water, alcohol and ether. Its chemical constitution does not differ greatly from quinine, and its therapeutical powers are very similar, and it is said to be an admirable substitute, as an antiperiodic, whilst by other powers besides its tonic, it possesses a more varied adaptation for different diseased conditions.

Geranin is a resinoid, obtained from the geranium maculatum, commonly known as Crane's bill, crowfoot, &c. This plant is indigenous to most parts of the United States, and has been long used in medicine as a reliable astringent. This active principle, the geranium, as prepared by the American Chemical Institute, is a powerful astringent, and is very convenient to administer, as unlike the most of the astringents there is no unpleasant taste to it. It is a reddish brown powder, of a pleasant aromatic odor, and possessing an astringent taste with but little bitterness.

Xanthoxylin is a resinoid from the xanthoxylum paxincum, the prickly ash. This plant has been in use as a medicine and its properties comparatively well known. The xanthoxylin is a yellowish cream colored powder with a slightly bitter taste.

Veratrin is another resinoid obtained from the veratrum viride, known as American bellebore, Indian poke, itelweed, &c. The medical properties of this plant have become pretty well known, as much has of late been written on the subject, and from different varieties, the v. album and the v. sabadilla, active principles have heretofore been obtained called veratria, sabadilla, and veratrin, according to the authors of the work we have mentioned before. The veratria heretofore obtained is an alkaloid and is called by them veratrine. The veratrin heretofore obtained is also

said to be an entirely different substance from their preparation, and is not a resinoid. The veratrin prepared by the American Chemical Institute, is a light snuff colored powder, with very little odor or taste, and possesses the therapeutic properties of the plant in an eminently concentrated form. The tincture of the plant is the form in which it has been used at St. Mary's Hospital.

With these brief remarks, by way of introduction, we shall proceed to details of cases, exemplifying in some degree their therapeutic action.—We do not indeed pretend to offer anything new in regard to their actions nor by any means, to recite all that is known, but as they are yet comparatively new preparations, any increase of testimony may assist to establish their just merits and to draw the attention of the profession to such as are found worthy of confidence, until by repeated trials their different properties and adaptation to different conditions may be more reliably determined,

CASE I.—CATHERINE JOHNSON,—IRISH, AGED 16.

Has an intermittent of six months standing, assumes a tertian form until interrupted by treatment, when it returns again on the seventh day, or one of its multiples, and immediately runs again into a tertian or quotidian. About four weeks now, in the Hospital. Has a relaxed state of the bowels, but no discernable organic changes. Skin constantly cold and inclining to a purple tinge, showing a sluggish state of the capillary circulation. Has taken a great deal of quinine, and also arsenical solution.

Jan. 30. Prescribed, hydrastine, gr. ii., geranin gr. iii., to be taken three times a day.

Feb. 2. Bowels have become perfectly regular in their action, and the discharges natural. Omit the geranin and continue hydrastine.

Feb. 5. The chill returned again to-day, the seventh day since the last paroxysm, viii. gr. were ordered to be taken next morning, in order to prevent its return, it however did so earlier than on the previous day, and she was now directed to take v. grs. every three hours.

Feb. 7. No chill returned, and as the medicine nauseates very much, it was reduced to v. grs. three times a day.

Feb. 9. No return as yet, and supposed to be under full influence of the medicine, as she has observed for three days a ringing in her ears. Dose reduced to 11 grs. twice a day.

Feb. 15. Another severe paroxysm to-day, although she has taken the medicine every day since the last; now ordered quinine grs. viii. in the morning, which again broke it, and she was continued on 11 gr. doses twice a day without any subsequent return, until about March 10th, making over three weeks since the last, when as she appeared so much improved in every respect, including the capillary circulation and external heat which had become normal the medicine was discontinued, but there was no cure for it returned again on the 18th as firm as ever, and she is again under treatment.

CASE II.—HELENA JOHNSON,—IRISH, AGED 14.

Sister of the above, and has been sick, and in the hospital about the same length of time as her sister. But in her case the disease has made greater ravages. There is enlargement of the spleen, with constant pain referred to that region, pulse at all times much accelerated and the same condition of the external surface as in her sister. There has been some effusion into peritoneum which has disappeared. Bowels are regular.

Feb. 11. Had a severe paroxysm, the first for fourteen days. Prescribed hydrastine gr. v. twice to-day, and grs. viii. to be taken in the morning.

Feb. 13. No return since, reduce dose to grs. ii. twice a day.

Feb. 14. No return of chill but more pain in her side, with fever. Omit the medicine and apply blister over the seat of pain.

Feb. 16. Less pain but pulse still too frequent. Prescribed, tinct. veratrum viride gts. iii., three times a day.

Feb. 20. Very much improved, no return of paroxysm although seventh day has passed since last; less pain and pulse more natural in its beat. Veratrum keeps up a free diaphoretic action of the skin. Bowels become too loose. To continue tinct. verat. with geranin iii. grs. every 4 hours. This soon regulated her bowels; verat. was continued until about March 10th, when she was put on the use of iron. There has been no subsequent return of the paroxysm.

CASE III.—DANIEL SULLIVAN—IRISH LABORER.

Entered the hospital Feb. 14. Has had an intermittent, which commenced as a tertian, seven months, intermitting a number of times from the effects of medicines, for seven, fourteen or twenty-one days. Has never had a daily paroxysm for four days. No great functional derangement of the digestive organs.

Feb. 15. Was ordered hydrastine grs. x. which was repeated for three

days, the paroxysms each day becoming milder, commencing later and of shorter continuance.

Feb. 18. As the tongue has become much coated, ordered hyd. c. creta x. grs. at night, and the same amount of hydrastine combined with grs. iii. xanthoxylin.

Feb. 22. Has continued the hydrast. and xanthor. up to present time. Paroxysms return new every second day, very mild. Hydrastine being used up, was ordered viii. grs. quinine, and the next day commenced taking tinct. of bark with iii. grs. xanthox, in each dose. This has been continued up to the present time (March 15th,) with no return of the paroxysm.

CASE IV.—ESTHER HAVENS—IRISH, AGED 14.

Has had intermittent for past six months. Paroxysm returns new every second day.

Feb. 14. Ordered hydrastine grs v. twice a day.

Feb. 17. Chill returned, having skipped over one day; ordered hydrastine viii. gr. and xanthoxylin gr. ii., and to be repeated on the second day.

Feb. 21. No return, was put upon Peruvian bark.

Feb. 26. Her bowels having become relaxed, prescribed geranin gr. ii., xanthoxylin iii. gr., three times a day.

March 1. Has left hospital, having had no return of the paroxysm since the 17th.

March 15. Has returned again to-day, with the same old complaint.

CASE V. MUTER—GERMAN.

Feb. 20. Entered hospital several weeks since for erysipelas with daily rigors which passed off with suppuration taking place. This day chill followed by fever occurred. *R.* Hydrastine x. grs., xanthoxylin grs. v., to be repeated on the second day.

Feb. 22. No return; ordered bark, *3i.* twice daily, in whisky. This has been continued up to the middle of March with no subsequent return of the paroxysm.

The foregoing are nearly all the cases in which we have been enabled to try this remedy, owing to the limited quantity received, and all of them it will be readily seen, of the most unfavorable character, and yet in all it proves itself a remedy of considerable efficiency, capable, I imagine, if continued a sufficient length of time, and followed up by a proper tonic course, of curing the most of cases, and in recent cases, acting much

more efficiently, as is shown in case five, although this patient had been much worn down by his previous sickness.

That it possesses powers equal to quinine cannot be claimed for it, and indeed is not by its discoverers; and yet there are cases in which it will be a most admirable substitute; where there is much gastric or interetic irritability in which quinine would be liable to excite vomiting and diarrhœa.

There is a condition of the skin observed after taking quinine in large doses, and after continued for some time in small doses, so commonly presenting itself as to lead to the supposition that it may arise from the secondary sedative action of quinine upon the nerves of organic life. This is a cold and purple condition, betokening sluggishness of the circulation.

Whether it arises from this cause, or from violent miasmatic impression, as a very similar condition is often observable in continued fever, it has not been observed to follow the use of hydrastine, and patients presenting this, under the use of this medicine have rapidly passed from it, and the skin has quickly assumed a more healthy appearance, temperature and action. The medicine has been found much more agreeable to take than quinine, and fewer unpleasant sequences have resulted. Nausea has seldom been produced, and ringing of the ears, although it was referred to the effects of medicine in one case was found present in no other.

The geranin, also, which has been used as an astringent in several of these cases, acted most admirably in controlling the discharges, without any unpleasant effects, and the same may be said of its action in many other cases involving various pathological conditions.

The next class of cases, will be some illustrative of the therapeutic action of *veratrum viride*, a remedy of which much more has been written, and which is perhaps better known than any of their concentrated preparations now offered to the profession. For much information in regard to this plant the profession is indebted to our excellent monograph, by Doct. Nerwood of North Carolina.

It will be perceived however that the tincture prepared by the American Chemical Institute has been used in a very different manner from that used by Nerwood and recommended by him.

CASE I.—HANS KLEVELL,—GERMAN, AGED 23

Jan. 30. Entered hospital eight days since, having an intermittent with

a daily paroxysm, since his admission has passed into a typhoid form. Skin very hot and pungent, pulse 110. Tongue dry and cracked, a good deal of gastric irritation, and profuse diarrhœa resembling new cider. Prescribed geranin gr. iii. gelsemin gr. i., asclepin gr. ii., mix, to be taken every three hours.

Feb. 2. Bowels have become regular, fever somewhat reduced and gastric irritability subsiding. Omit the geranin and continue gesemin and asclepin.

Feb. 5. Condition of digestive organs having much improved, the tongue having become moist, and more natural in appearance, but the pulse and external heat still keeping up, prescribed tinct. verat. viride gts. v. every three hours.

Feb. 8. Gastric irritation much increased, and more fervent action. Omit tinct. verat. and give mindererus.

Feb. 11. Very much improved; ordered wine; has continued to improve up to present time, a diarrhœa having set in on a return to full diet, which was, however, controlled by geranin.

CASE II.—THERESA BRINTZNER.

Entered hospital Jan. 30th, with severe form of typhoid fever. External heat very great. Pulse from 110 to 120. Tongue of a glossy red down the edges, and a heavy brownish fur down the middle. Pain or pressure over the stomach and diarrhœa. *Rx.* Tinct. verat. viride gts. iv. every 4 hours *3i.* paregoric at night.

Feb. 5. Has continued veratrum up to this time with apparent improvement. Bowels still moving too frequently, though discharges more natural. To-day medicine has produced great prostration, with excessive vomiting and hiccough. Pulse down to 60, and skin quite cold. Omit the veratrum to-day.

Feb. 7. Growing more feverish with incessant gastric irritation. Applied blister over the stomach and put on one of spirits of mindererus with occasional doses of hyd. c. creta as the need was indicated, and she was soon convalescing.

CASE III.—ANNA PATTEN—IRISH.

Feb. 3. Has been sick eight days with inflammatory rheumatism affecting both wrists and knees, much heat, swelling and redness, about the affected joints, and high symptomatic fever. Pulse hard and from 110 to 120. Tongue heavily coated with dark brown fur. *Rx.* Tinct. verat. viride gtt. v. every three hours.

Feb. 6. The medicine has produced vomiting. The fever, both general and local, is much reduced, the swelling and pain having mostly disappeared, and the pulse much softer and down to 85. The medicine produces free diaphoresis. Reduce dose of verat. to gtt. iii. every three hours.

March 10. The patient has been kept on the above dose up to present time, with steady improvement. By Feb. 17th, twelve days from commencing this medicine, was up and walking about the ward, and since March 1st, has been almost without an indication for medicine. Free diaphoresis was kept up, and slight exposure occurring in this state, to it was attributed occasional temporary returns of stiffness with some pain, which however again soon disappeared under the continuance of the veratrum.

CASE IV.—HONERA FLINN—IRISH.

Feb. 5. Has been sick with inflammatory rheumatism about three weeks, the same joints being similarly affected to the last case. Has been under same treatment in hospital about two weeks without improvement.

R̄. Tinct. veratrum viride gtt. v. three times a day.

Feb. 6. Free diaphoresis has been kept up but no nausea or vomiting has occurred. Fever, general and local, much reduced.

Feb. 19. Has been kept on the above treatment up to this time, with steady improvement; no nausea has been produced at any time, the appetite improving under its use, and the only sensible effects of the medicine has been its marked diaphoretic action. There has been no pain nor stiffness since the 12th, nor has there been since.

CASE V. CHAS. STEIGOR—GERMAN.

Entered the pest house attached to the hospital with a severe form of small pox, succeeding convalescence; from this, was attacked with inflammatory rheumatism in most of the joints of the arms and legs, accompanied with high symptomatic fever. Has taken calomel and quinine in full doses, also quinine and morphine in diaphoretic doses, and tried local applications of iodine without benefit.

Feb. 7. R̄. Tinct. verat. viride gtt. v. every four hours, to reduce the dose if it nauseates.

Feb. 9. Considerable improvement observable. Pulse, which on commencing the veratrum was hard and beating 90 per minute, has become much more compressible and fallen to 60, surface quite cold and the swelling and pain subsiding.

Feb. 18. The urine began to deposit lithic acid' on the 12th which was observable for several days in it, since which there has appeared to be more speedy improvement. There is no swelling now or fever, but occasional returns of stiffness and some pain on changes of the weather from fair to stormy, and also supposed to arise from exposure whilst sweating, as in the previous cases. Discontinued the veratrum and put him on the use of Peruvian bark, next day however, returned to the veratrum, as there was a slight return of fever and pain, and still continuing in about the same condition at the end of a week, and the medicine having ceased to produce diaphoresis, the dose was increased to gtt. vii. every 4 hours, this again produced free diaphoresis and with it speedy improvement, and he has had no more relapses.

CASE VI.—KEMBALL—GERMAN.

Feb. 8. Has now been in the hospital three weeks for a sub-acute inflammation, attacking the tissues of the joints principally of the hand and the shoulders, and passing very suddenly from one to another. Has suffered many times previously from similar attacks. The affected joints are considerably swollen and painful, and there is a good deal of general fever. *Rx.* Tinct. verat. viride.

Feb. 12. Sweats freely, urine now depositing lithic acid copiously, and much improvement in all the symptoms.

Feb. 15. Urine again clear and a return of the feverish action; bowels constipated; ordered laxative and to continue verat.

Feb. 17. Lithic acid deposit again, and all symptoms improved; since this date has continued to improve; the medicine having commenced to nauseate, was subsequently reduced to gtt. iv. doses combined with *3i.* mindererus three times a day, as in the other cases there have been occasional temporary returns of stiffness with some degree of pain.

CASE VII.—JOSEPH SCHELLAGICK—GERMAN.

Has been about six months sick with a chronic rheumatism affecting the knees and ankles. Has also had an ophthalmia which yielded to remedies administered for the rheumatism. Has taken quinine, alkalies, mineral water, veratrine, and tried external applications of iodine, with only temporary mitigation of the symptoms.

Feb. 7. Commenced taking tinct. verat. viride gtt. v. every three hours, under which treatment, the fever, swelling and pain soon subsided, and he quickly regained the use of the affected joints. He has continued

to take the same up to present time, as like the other cases, he has been subject to occasional returns of pain and stiffness in the affected joints.

CASE VIII.—JOHN MUSHNER—GERMAN, AGED 22.

Has been several weeks in hospital with erysipelatous, inflammation of the right knee. His father was subject to attacks of gout of which disease he died, and it is probable this man has inherited that peculiar diathesis, or at least a predisposition to inflammatory affections of the joints.

Feb. 15. The inflammation about the knee has been resolved. Last night sudden swelling of the joints of the right hand and ankle occurred with great pain and high fever. *R.* Tinct. verat. viride gtt. v. every four hours.

Feb. 17. Free diaphoresis has been produced, and urine is now depositing lithic acid; fever subsided, and the swelling disappeared from the first affected joints, and attacked with less severity the left hand and ankle.

Feb. 23. Has returned again to the right hand, the left still remaining swollen and painful.

Feb. 24. Has disappeared entirely from the left side, the medicine has ceased to produce sweating; ordered to increase the dose gtt. ii.

March. 2. Sweats again freely and urine again showing lithic acid, the swelling has disappeared from the hands, but the pain has gone to the shoulder joints. Continue verat. with ζ i. mindererus every 4 hours.

March 4. Medicine has produced emesis, and he is much better. reduce dose two drops.

March 15. Has continued to improve uninterruptedly up to present time.

The foregoing are all the cases we shall here detail. They are sufficient for our purpose, to show not simply that the veratrum viride is a medicine of great efficacy, and deserving the confidence of the practitioner, for ample evidence of this has heretofore been offered, but to show in what class of cases we may trust to its remedial powers. It is in inflammatory rheumatism and its congeneric diseases that it exerts the most decided influence in controlling the diseased action.

What is its *modus operandi* must be a matter of conjecture; we believe it to be primarily by action upon the nervous system, through it exerting its sedative influence upon the circulation, and secondarily by increasing the secretions, by the free diaphoresis, which it has produced in all these cases, and in the deposit of lithic acid following soon after commencing its use, in several cases eliminating a *materies morbi* from the

system. But by whatever mode of action it exerts its curative effects, its application in this disease is no new thing. By Doct. Tully, of New Haven, it has been recommended as a substitute for colchicum in gout, rheumatism and neuralgic affections, and so far our results confirm the later experience of Dr. Nerwood of North Carolina, but in other cases equally satisfactory results have not followed. In pneumonia it has been tried successfully, so far as quieting the external symptoms; reducing the circulation and extreme heat, and so far may serve as a valuable auxiliary in the treatment, but the local difficulty has remained. It does not possess the power of resolving organic changes, and cannot supercede the lancet in such cases.

In fevers it has been advantageously employed, but its efficacy is limited by the amount of organic change which has occurred in any organ and by the degree of gastric irritability present. The two cases of fever detailed here, go to confirm the experience of all who have written on it, that it will not be tolerated in such cases. In regard to the mode of use we have differed from that of Doct. Nerwood. Although nausea has supervened from its use in many cases, yet to obtain its full sedative power it has not been found necessary to carry it to that extent. In conclusion, we give our testimony that it is a valuable curative agent, a useful auxiliary in many inflammatory conditions, and exerting a peculiar power over rheumatism and its congenic diseases.

These medicines may be obtained at the Drug and Chemical store of T. R. Spence, Finny's Hotel Block, Woodward Avenue, Detroit.

E. P. CHRISTIAN, A.M.M.D.

Oral communications were then made by Profs. Sager, Gunn, and Ford, illustrated by specimens. It was moved and carried that copies be requested for the committee of publication. Prof. Andrews offered the following communication, which was referred to the committee of publication:

CASE OF RUPTURED BLADDER—BY E. ANDREWS, M.D.

Early in the present month I was called to the village of Northville to tap the abdomen of a man who had met an accident about ten days previously. On arriving at the place I found the patient already dead, so that there remained nothing but to have a post mortem upon the case, which I did in connection with most of the medical gentlemen of the

place. The history of the case, I learned from the attending physician and others to be as follows:—

The patient was strong, robust, and not much past the middle age.—He was in the habit of passing his urine only twice a day; once in the morning, and once at night. One day towards evening he was engaged in loading a saw log upon a sleigh. While he stood behind the log the rope which confined it broke, allowing it to roll backward, throwing him down upon his back, and coming with full weight across his abdomen. After he was extricated and taken home, no fracture of the pubis was discoverable, nor any other marks of great injury. There was prostration which was never followed by re-action. The next day it was discovered that he could pass no urine: his physician, therefore, introduced the catheter, but could only obtain about a teacupful. As the inability to urinate continued, this was done every day, and always resulted in obtaining the same amount. It was noticed that the urine would only run when the catheter was inclined downwards. At the same time the abdomen began to be distended with liquid, accompanied with pain and tenderness. Rupture of the bladder was deemed probable by the attendants. Several circumstances, however, obscured the diagnosis.

In the first place the peritonitis was of a delusive character. The pulse was soft, the tenderness on pressure was slight, and the pain was dull and heavy, rather than sharp: besides the bowels were not much constipated, and were easily moved by cathartics, and finally the patient continued to bear up against the disease, and after a few days recovered the power of voluntary urination, which threw doubt on the whole matter. He gradually grew worse, and died on the morning of the tenth day after the accident.

At the post mortem I found the abdomen very tightly distended so that fluctuation could scarcely be perceived. On cutting through the walls, about half a pailful of transparent serum flowed out, which was totally destitute of any urinous smell. The peritonæum was smooth and shining, and very few flocculi of lymph could be discovered. In the upper fundus of the bladder was found a rupture which was closed as it lay in place, but on introducing a blowpipe into one of the ureters and blowing air into the bladder it returned in bubbles through the rupture. The opening allowed the finger to be pushed through it without difficulty. The organ itself was contracted to a small compass. The remarka-

The point in this case is the recovery of the power of urination though the rupture was still pervious.

It would seem that the orifice must have been gradually closing assisted, as I suppose, by the contraction of the muscular fibres around it. This injury is reckoned mortal, unless it occurs where it has an opportunity to contract an adhesion with some opposite surface, and thus limit the effusion of urine. In reflecting upon the matter I have been led to ask whether the following course of treatment would not hold out a very fair hope of life in these desperate cases. First puncture the abdomen and draw off the fluid which might easily be tested to see if it contained urine. In case it did, it would decide the question of perforation of the bladder at once. Now the cause of death is the peritonitis produced by the irritation of the urine upon the serous membrane.

What should hinder the surgeon from tapping the abdomen once or twice every day, and after drawing off any thing which might be in it, washing it out by injecting large quantities of pure warm water, which had been previously boiled to expel the free oxygen? By this means the serous coat would be kept free from the irritating effusion. At the same time a catheter might be kept in the urethra to draw off the urine as fast as it came from the kidneys, and prevent in a great measure its effusion through the perforation. If this course were pursued, I do not see why the peritoneal inflammation might not be held in check so far as to allow the patient to survive a long time, and if the catheter kept the urine from accumulating, why might not the orifice heal up, the peritonitis subside, and the patient recover? It seems to me that the prospect of this would be more favorable than the faint hope which results from the chance of the effusion being limited by adhesion.

ART. II.—*Eighth Annual Meeting of the American Medical Association*

In accordance with our custom since the establishment of the *Peninsular Journal*, we propose to give a brief sketch of the annual doings of this great body composed of many of the most distinguished members of the profession, from every part of the Union, and possessing an interest to all having a regard for medical science and improvement. As our space will not allow of an extended account of all the proceedings at the recent meeting of the Association, we shall be most full upon such portions as will be of greatest interest to our own State and region.

The Association met in the Musical Fund Hall on Tuesday the 18th of May, and was called to order by the President, Dr. Chas. A. Pope, Dr. F. West, and Dr. E. S. Lemoine acting as Secretaries. Dr. Isaac Hays, Chairman of the Committee of Arrangements, on behalf of the medical profession of Philadelphia, welcomed the members of the city, in an appropriate address in which he stated that the committee had done and would do their best to make the members as comfortable as possible during their sojourn in their midst, alluding to the generous hospitality with which the Association had been treated elsewhere during its existence of eight years, and hoping that Philadelphia would not be behind in anything within their power. These acts of hospitality would be both a gratification and a duty extended as they were to the assembled wisdom of the medical profession.

The roll was then called, and at this time and subsequent periods during the meeting, about 540 members answered to their names, representing nearly all the States of the Union.

Those from Michigan were as follows:

MICHIGAN STATE MEDICAL ASSOCIATION.

N. B. Stebbins, H. Taylor, J. H. Beech.

Detroit Medical Society—Wm. Brodie, Zina Pitcher.

University of Michigan—A. B. Palmer.

Permanent Members—Aaron L. Kneeland, Isaac Paddock.

Michigan State Medical Society—S. M. Axtille.

After calling the roll, the President, Dr. Pope, delivered an address, in which after greeting the members present, proceeded to speak of the high and useful purposes for which they had assembled from the wide extent of our beloved country. He said:

“The elevation of a noble profession—the promotion of science—the good of humanity—these have been, are, and will continue to be, the objects of our Association. Whether we have, thus far, done much or little, our sole aim has been the advancement of the best interests of our fellow-men.”

He acknowledged the probability of our not having accomplished all that might have been done, and alluded to the strictures of some of the Medical Journals upon the proceedings of the Association, and suggested that instead of quarrelling with them for their interference, we should endeavor to profit by their advice and reproof, and that if a more ex-

cellent way was really pointed out, it would be our pleasure no less than our duty to follow it.

In view of the almost superhuman mission which physicians have to fulfil, the goal of their ambition, of their hopes and their duty standing at, or beyond the *ultima thule* of human capacity, they should gladly receive knowledge from whatever source. Should seek to know the secrets of organization, of physiology, pathology and therapeutics. These involve profound problems, some of them perhaps beyond the attainments of the human mind. So multiform are the elements which enter into these problems of health and diseases—health itself being a constant change of composition, and diseases ever varying changes supervening on this. And should we understand all these changes as well as we understand the most ordinary in chemistry—together with the internal disturbing causes and the influence of mental and moral emotions, to trace their various and almost infinite combinations, and especially the agencies which may most beneficially effect them, would require a continued stretch and power of intellect, of which it is doubtful if man be capable. Still, short of this perfect knowledge, our art is made eminently useful to humanity, and the nearer this perfection in knowledge we arrive, the more useful may we become, and to this we should and do aspire. Although we may never reach, we can eternally approach it—and, with this vast field, this boundless expansion ever before us, we may struggle on upwards and onwards, and shall never, like Alexander, weep that there are no more provinces to conquer.

The object of this association is to help on this advancement towards the far distant goal of perfection, and to this end it has not altogether failed. Many valuable contributions to science have been elicited—professional ambition has been stimulated—an *esprit decops* has been successfully evoked and established. Strength in the profession has been stimulated, discovery has been accelerated and advancement has been made.

The address also suggested that for the more perfect accomplishment of these objects, all the contributions be read in full and carefully considered, fully discussed, and go forth to the world with either the sanction or the criticisms of the Association upon them. This would require time, but if we have time to meet at all, a few days could make but little difference, and the increased good that would be effected would yield a ten-fold compensation for the time employed. Time should be taken for

the discussions of such questions as the nature, causes and treatment of cholera, yellow fever, &c. Hygiene, and the laws of health affecting masses of men—quarantine—the causes of mortality among children—the chemical and vital doctrine of life.

“Questions like these indicated a year in advance for discussion, would excite a carefulness of investigation, and a degree of attention and thought which could not fail to clear away much of the darkness and doubt in which they are shrouded. Nothing so sharpens the intellectual powers as public debate. It fixes attention, and strains to the utmost every faculty. I have no hesitation in saying that facts enough have been accumulated to establish great and general principles, of which the medical world is yet in ignorance or doubt. Nothing would contribute more to demonstrate these principles than the collision of natural intellects in public debate. What a mass of facts, and argument, and demonstration would be brought to bear on any of the subjects alluded to, if some of the best minds in the profession were to debate them, after a year’s preparation! Observed facts are the crude materials of science—the intellect is the master builder of its august temple.”

The address further suggested that biennial meetings be held at the same place, say at Washington, while the alternate ones be held as now at alternate points—that legislation could only require mediocrity of professional attainment—that the greater lights of the profession cannot be manufactured by any process of law—that thirst of knowledge, self-love, philanthropy, burning ambition—these make and mark the great physician and surgeon.

The address, which was listened to with attention and followed by marks of approbation, closed with the following allusion:

“On the eve of the battle of the pyramids, Napoleon exclaimed, Soldiers! from the height of yon monuments, forty centuries look down upon you. Gentlemen, from the heights of past ages, countless worthies of our God-like profession point and beckon to a goal more elevated than that which attracts legislators and conquerors, Solons and Cæsars.”

A vote of thanks was returned for the President’s address.

The committee of arrangements recommended that the time for the sessions of the Association be fixed from 9 o’clock A. M., to 3 P. M., with a recess of one hour at 12 M., adopted.

A recess was taken for the purpose of appointing a committee of one from each state by the delegates from the respective states, for the pur-

pose of nominating officers of the Association, designating committees &c.

The delegates from the several states reported the following names as the committee on nominations.

Maine, A. J. Fuller; New Hampshire, Silas Cummings; Vermont, I. Hinckley; Massachusetts, C. P. Fiske; Rhode Island, John Maurans; Connecticut, P. A. Jewett; New York, —McCall; Pennsylvania, J. B. Biddle; New Jersey, Lewis Condict; Delaware, James W. Thompson; Maryland, Chas. Macgill; District of Columbia, Thomas Miller; Virginia, B. R. Wellford; North Carolina, O. F. Manson; South Carolina, P. C. Gailliard; Georgia, Richard D. Arnold; Alabama, P. H. Cabell; Tennessee, J. Berrien Lindsley; Kentucky, C. J. Blackburne; Ohio, R. S. Hilles; Indiana, Joel Pennington; Illinois, J. V. Z. Blaney; Michigan, A. B. Palmer; Mississippi, L. D. Perry; Iowa, J. E. Sanburne; Wisconsin, J. B. Dousman.

It was moved and adopted that the committee be instructed to recommend a place of meeting for the next annual Convention.

Dr. Pitcher, of Detroit, presented a communication from the faculty of that place, asking that the next meeting of the association be held there. Referred to committee on nominations.

Invitations to meet at Chicago and Nashville, and so much of the address of the President as relates to the place of meeting, were also referred to the nominating committee.

Several motions were made respecting the paying of assessments by members of the association not present at a meeting, all of which, on motion of Dr. White, of Buffalo, were referred to a committee of which he was chairman, which subsequently reported the following resolutions, which were adopted:

Resolved, That upon no permanent member who is not present at a meeting of the Association shall be assessed the annual contribution, but no one shall be entitled to receive a copy of the printed transactions, unless he pay into the treasury a sum not less than the annual assessment paid by the delegates and permanent members in attendance, and that all the names of permanent members that have been left off the published list, be inserted in the next volume of transactions.

Resolved, That no assessment whatever be made against members by invitation, but that they also be entitled to a copy of the printed transactions, by paying the sum assessed upon delegates in attendance.

The reports from the standing committees being in order, Dr. R. L. Roche, from the committee on prize essays and volunteer communications, reported that the essays received for prizes were six in number—that most of them were written with ability and would be useful to the profession; but they had awarded a prize but to one. This essay was entitled “Statistics of Placenta Prævia.” The author was found to be James P. Trask, M. D., of White Plains, Westchester County, New York.

An abstract of a report on the epidemics of Missouri, Illinois, Iowa and Wisconsin, by Dr. Reyborn, of Mo., were read by one of the Secretaries, and the report was referred to the publishing committee.

Dr. S. B. Hunt, of Buffalo, presented a report on the hygrometrical state of the atmosphere in different localities, and its influence on health, which was read in part and referred for publication.

SECOND DAY.

The committee on nominations presented the following names for the various offices of the Association, which were unanimously elected.

President—George B. Wood, Pennsylvania.

Vice Presidents—William M. Bolling, Alabama; Daniel Tilden, Ohio; D. Humphrey Storer, Massachusetts; Grafton Tyler, D. C.

Secretaries—Francis West, Penn.; R. C. Foster, Tenn.

Treasurer—Casper Wistar, Penn.

Committee on Publications—Francis G. Smith, Penn., Chairman; Francis West, Penn.; R. C. Foster, Tenn.; Samuel L. Hollingworth, Penn.; H. S. Askew, Del.; Samuel Lewis, Penn.

The President elect on taking the chair, said that he felt deeply sensible of the honor conferred upon him, and though he had all his life devoted himself to the cause in which we are all engaged, yet he is unaccustomed to preside, and any errors which he may make, he hoped the Association would excuse. He assured the Convention that he would do his best to justify his appointment as presiding officer.

The committee further reported on the subject of the next place of meeting, and recommended Nashville, Tennessee, but not unanimously.

Dr. Post, of New York, moved to substitute, Washington, D. C., for Nashville. Dr. Watson, of New York, proposed Detroit, Michigan. After some remarks in favor of Nashville, by Dr. Lindsley, of Tennessee, Dr. Blackburn, of Kentucky, and others, the motions of Drs. Post and Watson were laid on the table.

The question recurring upon the adoption of the committee's report re-

commending Nashville, Dr. Palmer, delegate from Michigan, after stating the action of the nominating committee upon this subject and referring to the expectations of the profession and the citizens of Detroit from the invitation having been extended to the Association to meet there a year ago, &c., moved that Detroit, Michigan, be substituted in the report for Nashville, Tennessee.

A resolution was offered that the whole subject be referred to a special committee of five, to be appointed by the Chair. Laid on the table.

The question was now taken on the motion of Dr. Palmer, and it was adopted. The result was approved by rounds of applause apparently from all parts of the house.

Dr. R. C. Foster appointed Secretary, tendered his resignation, which was accepted.

Dr. Brodie, of Detroit, Michigan, was elected to fill the vacancy.

A resolution was adopted, providing that a committee be appointed to confer with the directors of the several railroad and steamboat companies, with the view of having commutation tickets issued to the delegates to the convention, to be held at Detroit, next year.

The next business in order was announced to be the report of Dr. Frank. H. Hamilton, of Buffalo, New York, "On the frequency of deformities in fractures." This document abounds with references to cases of fractured limbs, and is replete with various suggestions. Dr. H. delivered a short address on the subject of the prosecution of Surgeons for malpractice. He could not really understand why the profession was so often subjected to prosecutions, unless it be that too much is asked to be done. He had been informed this morning, that in a district not over forty miles from this city, within a few years past not less than twelve prosecutions have been made against brothers in the profession. We do not hear of lawyers being subjected to suits for malpractice, and yet it is apparent to all that there are those in that profession who certainly deserve to be prosecuted.

These are men of no money, without morals, ever hanging about the purlieus of the court houses, ready at a moment to urge prosecutions against our profession. He was informed by an eminent lawyer, a high minded honorable member of that profession, that he had never engaged in a prosecution against surgeons; he had ever looked upon such as *persecutions*. In conclusion, he invoked the members to interrogate themselves as to the cause, and then apply the proper remedy. Why are we

thus prosecuted? Is it because there are those among us who are stimulated by jealousy? Ask yourselves this question. That there are some among us who profess to do more than can be done, is well known. We have heard members of the profession declare they could mend a fractured femur without shortening the limb; this is simply an impossibility, and it is disgraceful to make such assertions, because it is not true, and it is calculated, to not only degrade, but subject us to these prosecutions. He hoped that hereafter, brother members would not claim to do too much.

Dr. Chas. Hooker, of New Haven, read a report upon the "Diet for the Sick." The document lays down certain laws for the government of diet in the various diseases "flesh is heir to," and specifies articles that may be given to patients. Referred to the committee on publications.

The Association took a recess for the purpose of accepting an invitation to meet Mayor Conrad, in *Independence Hall*. The Association was introduced to the Mayor by the Chairman of the Committee of Arrangements, Dr. Hays, in an appropriate speech, referring to the benevolent mission of the profession, and to the fact of its not being restricted to the cure of disease, but extending to whatever improves our mental and moral condition, &c. Instancing Warren, Ruth, and others, who were high in the profession, and also distinguished in the cabinet and the field, during the times which tried men's souls. The reply of the Mayor was an eloquent tribute to the usefulness, the dignity, the heroism and benevolence of the profession.

The following extract presents Mayor Conrad's views of the heroism of the physician, at the same time giving a fair specimen of his style and spirit:

"It is the glorious peculiarity of your profession that, while ambition, in its ordinary and most applauded paths, plays the part of *the destroyer*, and wins glory at the expense of human life and happiness, you, and yours, with a more exalted civilization and a nobler heroism, have ever *sought to save*. Next to the highest of all human courage—if, indeed, it be merely *human*—that of the martyrs of religious truth, the courage of the physician, whether on the battle field or in the lazarhouse, the courage of science and humanity, is the most sublime, and best entitled to the *clarum et venerabile nomen*. The vulgar courage of the warriors under the base stimulus of passion or the low greed of applause, can hardly be compared to the noble intrepidity of the surgeon, who glean,

in the ruthless and red-handed reaper's path the leavings of battle; and still less with the hero of the hospital, who encounters the grim antagonists in the horrid silence and gloom of the pestilence. Imagination can hardly embody an instance of human courage and virtue more sublime and unearthly than that of the physician, who in the midnight of a plague-stricken city, midst the foetid solitudes of its alleys, and entering the devoted hovel of the wretched, ministers—while only pestilence, and misery, and death, and God look on—to the perishing. I need not step from this spot to grasp the hand of many a hero who claims no laurel—many a noble philanthropist whose sacred labors in scenes like these, have been unmarked, save by the eye that never slumbers, and remembered only by Him, who alone can reward.

To such a profession, one venerable from its antiquity, noble from the grandeur of its objects, illustrious from its achievements, and which demands every aid and energy of genius and science, of head and heart that dignifies the race, it is not strange that, go where it may, a ready homage greets and a ready blessing attends it. In our own city all that is noble in patriotism, all that is exalted in science, all that is bright and beautiful in the arts that refine society, all that is lovely and cherished and holy in private life combine to render the profession sacred and dear to us."

Speaking of the sacrifices made by those who had come from their distant homes to contribute each his portion to the general interest, and devise means for the improvement of medical science and the profession he contrasted the medical profession with that of the law. "Never," said he, "has a concerted effort been put forth by the members of the bar to elevate the standard of acquirements among themselves, or remove from our statute books the blots which disfigure them."

The following is the closing paragraph of this eloquent speech:

"We recognize in the members of an enlightened profession like yours, so many patriots and philanthropists engaged in the great and general interests of the human race, and, apart from the mere scientific acquisitions of your annual meetings, we perceive, in them, results auspicious to all that we cherish, all that is kindly, forbearing and conservative between man and man, party and party, 'state and state, section and section, and so regarding them, we hail and greet you with a welcome as sincere and cordial as the heart can forge or the tongue can utter."

The Mayor's address was received with much favor—and the occasion was one of deep interest to the 500 and more physicians crowded into

the old Independence Hall surrounded by so many mementoes of 1776.

After the Association re-assembled at their Hall, a vote of thanks was presented to the Mayor for his reception and address, and a copy of the address requested for publication in the transactions.

The following resolutions were offered by Dr. Thompson, of Delaware, and made the special order of business for the next morning, when after discussion in the committee of nominations and in the Association, the blank filled by "one member," they were adopted:

Whereas, That as few subjects of greater interest and importance could be presented to the consideration of the American Medical Association, now representing most of the States and Territories of the Union, than the attainment of a correct medical topography of each, with a history of its prevailing fevers and most successful treatment of the same, therefore, be it

Resolved, That with this view and conviction, this association appoint a special committee for each state and territory represented, of ——— members, whose duty it shall be to report upon its medical topography, epidemic fevers, and the most successful treatment thereof, and that the same shall continue to hold their office for three years.

Resolved, That as other states and territories not now represented, become so by delegates duly appointed to this National Association, that similar committees shall be appointed for like purpose, and that they also shall hold their office for three years.

Resolved, That in the appointment of gentlemen of education and experience in the affairs of their own state, we have the best guarantee that the important objects we seek will be more satisfactorily accomplished, and the profession as well as the public interest will thereby be better served.

Resolved, That the committees heretofore appointed by this association at its session in Charleston, for a similar object, be, and the same are hereby discharged.

The following committee from each State was subsequently appointed under the resolutions:

Committee on Medical Topography and Epidemics—

Maine—J. C. Weston, of Bangor.

New Hampshire—Edmund R. Peaslee, Dartmouth College.

Vermont—Joseph Perkins, of Castleton.

Rhode Island—Joseph Mauran, Providence.

Connecticut—Charles Hooker, New Haven.
Massachusetts—George B. Shattuck, Boston.
New York—Joseph M. Smith.
New Jersey—Lyndon A. Smith, Newark.
Pennsylvania—Jacob M. Gemmill, Huntingdon County.
Delaware—James W. Thompson, Wilmington.
Maryland—Peregrine Wroth, Chestertown.
Georgia—John F. Posey, Savannah.
Virginia—P. F. Peebles, Petersburg.
District of Columbia—Thomas Miller, Washington.
South Carolina—D. J. Cain, Charleston.
North Carolina—O. F. Mason, ———.
Kentucky—William L. Sutton, Georgetown.
Tennessee—E. B. Haskins, Clarkville.
Louisiana—E. J. Fenner, New Orleans.
Minnesota—J. H. Murphy, St. Anthony Falls.
Ohio—G. Mendenhall, Cincinnati.
Mississippi—T. G. Grafton, Rodney.
Missouri—S. B. Alleyne, ———.
Michigan—J. H. Beech, Cold Water.
Alabama—S. W. Clanton, Warsaw.
Illinois—John Evans, Chicago.
Indiana—Vierling Kersey, Milton, Wayne County.
Wisconsin—Alfred L. Castleman, Delafield.
Iowa—E. A. Arnold, Davenport.
U. S. Navy—Thomas Dillard, Philadelphia.
U. S. Army—Clement A. Finley.

Dr. Pliny Earle, of New York, chairman of the committee on Publication, made a report, which states that 1,000 copies of the 7th volume of the report of the Association had been printed at an expense of \$1,806.42, of which number 781 copies had been furnished to members and sold, 35 copies furnished to editors of medical journals, and 184 copies remain on hand.

Dr. Isaac Wood, of New York, the treasurer, made a report showing \$1115.26 in the treasury.

A paper was read from Dr. Wm. H. Rayford, of Indiana, on pathology and treatment of scrofula. Referred to be printed.

Dr. Davis, of Chicago, presented a partial report on the nutritive qualities of milk, and the influence produced thereon by pregnancy and menstruations in the human female and by pregnancy in the cow; and also on the question whether there is not some mode by which the nutritive constituents of milk can be preserved in their purity and sweetness, and furnished to the inhabitants of cities in such quantities as to supercede the

present defective and often unwholesome modes of supply.

The report was referred to the committee on publication, and the committee continued to complete the subject.

The Hon. Judge Lewis, Chief Justice of the State of Pennsylvania, being present, was unanimously invited to a seat upon the platform.

Dr. J. G. Orton, of New York, offered resolutions requesting medical societies throughout the country to require their members to keep accurate records of their cases, and present annual digests of the same to this association through the several state societies. Referred to the committee of one from each state.

Dr. Condie, of Pennsylvania, stated that, although not quite finished, he was prepared to read his report on "The causes of tuberculous diseases." It, however, embodied a space of five hundred pages, and an abstract would require sixty pages. He could not expect the association to publish it, but left it entirely with them to do as they pleased, for there would be no difficulty in its being brought out by medical publishers.

On motion, Dr. Condie, was authorised to exercise his own discretion in the matter.

On motion Dr. Mussey, of Ohio, read an abstract of his report upon the "Influence of Alcohol in Health and Disease." This report was considered as highly appropriate to the present period of excitement in regard to the temperance question, and the views of the venerable author seemed to us to coincide fully with those of the advocates for total abstinence. The report was ordered to the publishing committee.

Part of the report by Dr. Balchford, of New York, on "Hydrophobia" was read by the secretary, and ordered to be published. The committee was continued.

On the fourth day the Association assembled as usual at 9 o'clock, A. M. Our report has already extended to such length we can only give a small portion of the business of the days proceedings.

The following amendments to the constitution was offered, and, under the rules laid over until the next annual meeting of the association.

"Any permanent member who shall not pay for the published transactions for three successive years, shall be considered as withdrawn."

Dr. N. S. Davis, of Chicago, Ill., submitted the following preamble and resolutions:

Whereas, there has been regarded a serious defect in the operation of our organization, impairing its scientific character, therefore

Resolved, That the daily sessions of the Association during each annual meeting, be divided into two parts—the first to terminate at an hour not later than 12 o'clock, M., of each day, and to be devoted, as heretofore, to the general business of the Association—the second, consisting of all the time which it is deemed advisable to remain in session, each day after 12 o'clock, M. to take the character of a scientific session, and to be devoted exclusively to the discussion of questions relating to the science and art of medicine.

Resolved, That the Association, in its capacity of a scientific session, having no power to act on any subject except of a scientific character, may continue in session, whenever thought advisable, a longer period than in its most general capacity.

Resolved, That the foregoing preamble and resolutions be referred to the committee of arrangements, with instructions to report on the same at the next commencement of the next annual session.

The preamble and resolutions were agreed to.

Dr. A. J. Semmes, of Washington, District of Columbia, offered the following, which was adopted:

Resolved, That a committee of three be appointed to report to the Association at its next annual meeting what measures should be adopted to remedy the evils existing in the present methods of holding coroner's inquests, by incompetent persons, by which the lives and liberties of the innocent may be jeopardized, and the ends of justice frustrated.

(*To be Continued.*)

ART. III.—*Notes in the Dissecting Room.* By E. ANDREWS, M.D.

As every scientific fact is of value, the following brief notes of observations made during the winter in the dissecting room are offered.

The first is a case of obliteration of the os internum of the uterus. The organ externally presented nothing remarkable, but on laying it open the mucous membrane of the cervix seemed to form a sort of cul de sac, without any upper orifice.

Another subject showed a malposition of the vena cava, that vessel descending on the left instead of the right side, when it reached the level of the heart, it turned a right angle and entered the auricle exactly as the coronary vein usually does.

A fourth cadaver presented a curious little fracture. A little piece of bone as large as a 25 cent piece was broken off from the tuber ischii, containing the origin of the inferior gemellus muscle, as the action of the muscle drew the fragment away from its place, but the fractured surfaces had become smooth and remained bare.

Two subjects which were in the room at the same time presented each a rupture of the muscles, which must have occurred before death, and what is singular is that it was the same muscle in both subjects. The semi-membranosus of the thigh of each was torn completely across, and changes had occurred in the lacerated tissues which indicated that they must have been alive a short time after the rupture. It probably took place during the spasms of the last agony. The circumstances were such as to render it demonstratively certain that the two had not died together, nor been subjected to any common accident which could affect both with the same injury.

Another subject exhibited a series of malformations. It was an adult female. In the heart the foramen ovale was found sufficiently pervious to admit the handle of the scalpel. This malformation is generally supposed to be the cause of the disease called cyanosis, in which the patient fails to reach a full development of the sexual organs, and never undergoes changes of puberty, and does not survive that period when that change should take place. In this female, however, the genital organs both internal and external were larger than usual. There was no blueness of the skin, but rather an extraordinary whiteness and fairness of the whole surface. There were several indications however of incomplete development. The heart for instance had but one coronary artery, which was the right, and passing around in the auriculo—ventricular furrow, made the entire circuit of the organ, and by its terminal branches supplied the absence of the left coronary. The skeleton was found to present the remarkable peculiarity of a pair of floating ribs above the sternum. The first pair of ribs were slender, and resembled the 12th pair except that they were more curved. They did not reach the sternum by an inch and a half, and had not even a ligamentous connection with it. The second pair of ribs had the same shape which the first pair usually has, and articulated to the sternum in the same place.

EDITORIAL.

This number closes our second volume. We tender our sincere thanks to those of our patrons who have supported us thus far with their pens and their subscriptions. We shall go on to our third volume with increased courage and zeal. At the same time we have to regret that many of our subscribers, pinched we suppose by the hard times, have omitted to pay at all, to say nothing of "*in advance*." We hope that there will be greater promptness in this respect, because we have some important improvements in contemplation for the Journal, which are retarded by the slowness of receipts. We publish an index and title page this number for the completion of the volume.

American Medical Association.

We put over much valuable matter to give our readers the benefit of a full report from this body. We call attention to the fact that its next meeting is to be held in this State, and that if we wish to make a respectable appearance before the profession of the nation, it is important that we use all diligence in bringing up our organizations both general and local to the highest possible degree of perfection. We have a number of vigorous medical societies in the state, but not half as many as we ought to have. Probably our readers are generally aware that those who attend the national meeting as delegates sent by societies become thereby permanent members with all the rights of voting &c., while those who merely enter as individuals, are as it were, members by privilege, without the full powers which the others enjoy. Every medical society is entitled to send one delegate for every ten members. Great numbers of our physicians will attend the meeting—let them organize county societies all over the state, and go as delegates with full powers. We shall thus have a greater interest excited among us, we shall perfect our own internal organization and put our science and art in a higher position before the world. It will be many years before another opportunity will occur to render with such ease so great a service to the profession.

Report of the Sanitary Commissioner of New Orleans on the Epidemic Yellow Fever of 1853. Published by authority of the City Council.

This is a large report of over five hundred pages. It contains many documents on the subject of the disease, together with a chart of the city, marking the points where the various cases first occurred, &c. The first part is taken up with the facts of the epidemic as detailed in the testimony of different physicians. The last part, and the most important, is occupied with the report of Dr. Edward H. Barton, who seems to have been at the head of the commission. The report is long and contains exceedingly important suggestions respecting the means of preserving the public health, but we have not room to give the reader a fair view of them.

Byrne on Cholera or an Essay to prove the contagious character of malignant cholera. By BERNARD M. BYRNE, M. D., Surgeon, U. S. Army. second edition, 160 pages. Published by Childs and Peterson, Philadelphia.

WE have just received this work which seems to be prepared with care, but we are obliged to postpone a full examination of it to a future number for want of room.

Surgical Reports and Miscellaneous papers on Medical Subjects. By GEO. HAYWOOD, President of the Massachusetts Medical Society, &c., 450 pages. Published by Phillips, Sanburn & Co., Boston, and J. C. Derby, New York.

Just received, we shall take an early opportunity to examine it.

WE have received the following pamphlets which we are obliged to postpone examining until another number, viz:

Annual announcement of Lectures of University of New York.

Oration delivered before the Physico Medical Society of New Orleans. By A. MERCER, M. D. P.

Cases of Polypus of the Womb. By WALTER CHANNING, M. D.

Chemical Analysis of the the Tennessee Collection of Urinary Calculi. By E. B. HASKINS, M. D.

A paper on Protracted Valvular disease of the Heart. By JOHN W. CORTON, M. D.

WE call attention to the following notice:

Prof. ANDREWS:

DEAR SIR:—The second semi-annual meeting of the North Eastern District Medical and Scientific Association will be held at Romeo, on the second Thursday in June, 1855. A public address will be delivered by a member of the Medical Faculty in the University of Michigan.

Armada, May 2d, 1855.

H. M. SNELL, Secretary.

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